

FROM DYNASTIC RISE AND FALL TO CONTEMPORARY TRANSFORMATION

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Contents

Chapter One: The Rise and Fall of Dynasties	4
Why Can a Utopia Never Exist?	4
From "Era of Order" to "Golden Age"	5
Eunuchs, Factionalism, and Reforms	8
The Collapse of Dynasties	10
Some Argument.....	11
Chapter Two: Long Unity After Short Division.....	13
Administration Costs and Transaction Costs	13
Geographical Dependence.....	14
Logographic Script.....	16
The Axial Age	17
Confucianism on the Outside, Legalism on the Inside	18
Buddhism and Daoism.....	19
Chapter Three: Southern Farming, Northern Herding	21
Cultural Differences	21
Governing Methods.....	22
Willingness to Wage War	24
Divided Rule Along the River	26
Unifying North and South, Qing Dynasty	28
Chapter Four: The Three Worlds	30
Simple Historical Periodization	30
Historical Materialism.....	31
The Darwinian World.....	32
The Hobbesian World.....	34
The Wilsonian World	35
Chapter Five: The Industrial Age	38
The Vanishing Cycles	38
The Scientific Revolution.....	39
The Bourgeois Revolutions	42
The Industrial Revolution.....	44
Chapter Six: The Positive-Sum Game.....	47

The Allegory of Gold Mines, Cities, and Capital	47
The Evolution of Capital, Population, and Consumption Power	48
Market-Based Economic Logic	49
The Role of Government.....	50
Chapter Seven: Autonomy and Balance of Power	53
Individualism (Personal Sovereignty)	53
Mediterranean City-States	53
The Birth of the Dutch Parliamentary System	54
Democracy and Constitutionalism.....	55
The Foundation of British Constitutionalism	56
The Formation of the Middle Class	58
Chapter Eight: The Disadvantage of Late Development	60
Grassroots Transformation	60
Land Reform/Revolution	61
Secularization	63
Primitive Accumulation of Capital.....	65
Chapter Nine: Accumulation and Outburst	67
Industrialization and Urbanization	67
The Historical Process of Reform and Opening-up	68
The Triple Driving Forces of Reform and Opening-up.....	69
The Waning of Structural Drivers	71
The Distribution Pattern of Reform and Opening-up	72
Chapter Ten: Lessons from Precedent	74
The Demands of Capital.....	74
Resource Misallocation.....	75
Economic Bottlenecks and Power Diffusion	77
Intrinsic Demand and Gradual Reform	78

Abstract

From Dynastic Rise and Fall to Contemporary Transformation: A Civilizational History and Economic Structure Analysis Spanning Three Thousand Years.

Employing a unique comparative political economy perspective, this book systematically interprets the deep structure of Chinese civilization and analyzes how it has shaped contemporary economic and political challenges.

The book is structured into three main sections, establishing a complete system of argumentation:

1. The Genes and Destiny of Civilization (Ch. 1-3): Tracing the cyclical laws of dynastic rise and fall, the geographic differences between North and South, and the Axial Age of Confucian and Legalist thought, this section reveals the inherent logic behind China's political patterns: dynastic cycles, unification and division, and North-South relations.

2. The Western Breakthrough and Enlightenment (Ch. 4-7): This comparative analysis examines the breakthroughs in Western civilization—science, industry, capital, and democracy—and how they fostered a 'positive-sum game' society. It focuses on the Industrial Revolution, liberal economics, the birth of the parliamentary system and the British constitution, and their structural foundation for individualism and the concept of limited power.

3. China's Transformation and Conclusion (Ch. 8-10): Building upon the historical and theoretical foundation established, this book deeply analyses modern China. It details the 'latecomer disadvantage' of bottom-level changes such as land reform and secularization, and analysis the factor-driven miracle of accumulated growth during the four decades of Reform and Opening-up. Ultimately, the author posits that the high concentration of power leads to resource misallocation, impeding the middle class's intrinsic demand for limiting power.

This book offers a unique key to understanding the underlying code of Chinese civilization, the immense cost behind its economic rise, and the fundamental causes of its current structural challenges.

Keyword:

Chinese Civilization History, Economic History, Comparative Politics, Limited Government, China Modernization

Chapter One: The Rise and Fall of Dynasties

Why Can a Utopia Never Exist?

As the inaugural piece of this series, we will begin by discussing the cycle of order and chaos (治乱循环, *zhì luàn xúnhuán*) in ancient Chinese dynasties. Although civilizations worldwide exhibit distinct forms, the fundamental laws of human survival—such as the biological instincts of metabolism and reproduction—remain universal. As the ancients observed, "Food and sex are human nature" ("食色性也," *shísè xìng yě*); consequently, marriage naturally leads to procreation. Given the lack of effective contraception in antiquity (modern hormonal birth control and painless abortion technologies only emerged in recent centuries), it was common for a healthy woman to become pregnant eight or nine times during her lifetime.

Modern archaeology suggests that the infant mortality rate in ancient times exceeded 50%. Thus, it would be considered fortunate for four out of eight children to survive. Nevertheless, population growth remained astonishing: a couple in the first generation yields four individuals in the second, eight in the third, and so on. Without external intervention, the population could approximately double every 30 years. This rate aligns precisely with the population growth data observed during the early stages of ancient Chinese dynasties.

If a true utopia, an "Arcadia" (*Shìwài Táoyuán*), were to exist, lasting for the 600 years from the Qin Dynasty to the Eastern Jin Dynasty, and assuming an initial entry of only 100 people: based on the aforementioned growth rate, the population would surge to over 100 million by the time of Tao Yuanming's era, comparable to the peak population of the Song Dynasty. Evidently, no utopia, regardless of its size, could accommodate such a massive populace.

The direct consequence of this population explosion is the intensification of land resource scarcity. Due to the stagnation of agricultural technology in ancient times, the yield per unit of land struggled to achieve qualitative leaps. When the population nears the carrying capacity of the land, the social structure is inevitably forced into a drastic transformation. Du Fu's famous lines, "There is no idle land throughout the realm, yet farmers still starve," vividly capture this predicament. As contradictions accumulate and reach a critical threshold, large-scale peasant uprisings erupt, which forcibly restore the man-land balance through war, famine, and disease. This is the fundamental reason for the periodic dynastic change in ancient China.

By comparing the civilizations across the Eurasian continent, we can identify three primary forms of conflict outbreak:

1. The Chinese Model: "Cycle of Order and Chaos" (治乱循环)

This model is the Chinese-style "Cycle of Order and Chaos" (*zhì luàn xúnhuán*): The collapse of a great unified political power is followed by a reduction in population through warfare, which then initiates a new era of stable governance. In this mode, during the early stage of a dynasty, the population is small and land is abundant. The

populace can live and work in peace and contentment, and the majority of the population are free peasants. When the population grows to approach the limit of the land's production capacity, the surplus population becomes landless. They will descend into being tenant farmers (佃农, *diàn nóng*), becoming laborers for the landlord class, and class contradictions thus arise. When the landlords' land is also fully planted, the even greater surplus population has nowhere to go, forming vagrants (流民, *liú mín*). Social order worsens, the cost of maintaining stability increases, and ultimately, contradictions escalate to an uncontrollable point. Nationwide peasant uprisings break out, and the population quickly decreases in the large-scale warfare until most of the land becomes vacant, and the new cycle begins again.

2. The West Asian Model: "Sustained Conquest" (持续征伐)

This second type is the West Asian-style "Sustained Conquest" (*chí xù zhēng fá*) model: Geographical fragmentation prevents the formation of long-term unified states, and various regions transfer population pressure through mutual conquest. In this environment, once the population in a certain region exceeds its limit, the landless farmers will invade neighboring regions to seize land. The neighboring regions also adopt similar strategies, seizing land from even more distant places. As a result, inter-state wars are continuous and regional conflicts are constant, with the population being consumed in the warfare until it is reduced to a scale that the land can sustain.

3. The European Model: "Slow Growth" (缓慢增长)

The third type is the European-style "Slow Growth" (*huǎn màn zēng zhǎng*) model: Harsh living conditions and frequent plagues result in extremely slow population growth. Medieval Europe was continuously affected by infectious diseases, and medical technology was extremely rudimentary, leading to an exceptionally high infant mortality rate. In this environment, the population growth that East Asia achieved in 30 years required them 300 years to complete. The initial population of 20 million in the early Middle Ages, under the grim conditions of scarce medicine and rampant disease, took 1,000 years to grow to 150 million by the end of the Middle Ages.

Since our concern is China, the focus of this chapter is primarily on the first model.

From "Era of Order" to "Golden Age"

The Arrival of the Era of Order (治世, *Zhì Shì*)

The initial phase of a unified dynasty followed a period of central plains-wide upheaval, where the majority of the old population had perished in brutal hunger, warfare, and massacres. Statistics show that the population decline during the end of the Han Dynasty reached a staggering 90%, plummeting from 50 million during the reigns of Emperors Huan and Ling to just 5 million during the Three Kingdoms period. Even in milder periods of turmoil, such as the interregnum between the two Han dynasties, or the ends of the Sui and Tang dynasties, population reduction still reached around 70%.

While missing census records are a contributing factor, these numbers undoubtedly contain a massive number of unnatural deaths.

With the establishment of the new unified dynasty, the lives of the populace gradually returned to tranquillity, and social order was reconstructed. The survivors could be considered fortunate. This was an era characterized by low population density and abundant land, a society not yet plagued by "involution" (*nèijǔǎn*). Given the ancient Chinese GDP structure, 95% of the empire's population were farmers, and in the early dynastic phase, self-sufficient peasants (*zì gēng nóng*) constituted the vast majority. In the dynasty's infancy, so long as the ruler was not extremely tyrannical and vainglorious, like Emperor Yang of Sui, the people could live rare, happy, and peaceful lives.

Note on Contraception: Legend has it that in ancient Chinese courts, after an imperial consort was favoured by the emperor, if the emperor did not wish for offspring, he would command a eunuch to massage the consort's pubic region to expel the semen. Generally speaking, the common people lacked systematic contraceptive methods. Following marriage, natural conception occurred approximately once every three years. It was normal for a healthy woman to become pregnant 8-9 times in her lifetime. However, the survival rate for newborns was very low; without vaccines and antibiotics, only about half of the children survived to adulthood. Assuming a couple raised two sons and two daughters: the daughters marry out, the sons marry in, and each son subsequently has an average of four children. In this scenario, the first generation of two people (the couple) becomes four (the surviving children) and then eight (the grandchildren). Consequently, the population effectively doubles every generation.

The Self-Sufficient Peasant (自耕农, *Zì Gēng Nóng*)

In the early dynastic period, there was still a large amount of uncultivated wasteland. The newly born population could claim and clear this wasteland. At this time, social contradictions were not deep, and the gap between rich and poor was not large. As long as there was enough land to cultivate, most people could live and work in peace, and the one thing the Chinese people never lacked was diligence. The Chinese character for "blessing/happiness" (福, *fú*) is composed of the radical for "divine revelation" on the left, and on the right, the character for "a plot of land" (一口田, *yī kǒu tián*). Having one's own plot of land was the happiest thing an ancient farmer could imagine.

This happiness extended from the Era of Order into the early stages of the Golden Age (*Shèng Shì*). However, as the population continued to grow, people found that all surrounding land had owners, and there was no new wasteland left to cultivate. The classic problem of land annexation (*tǔ dì jiānbìng*) then began.

The population was relatively small during the Era of Order, and talent was relatively scarce; sectoral involution had not yet begun, making it easier for talented individuals to rise. With the stable increase in tax revenue brought by population growth and the gradual flourishing of material life, a large number of nascent opportunities awaited exploitation. While government officials and their families often leveraged resources for a head start, commoners were not entirely without opportunity. For example, certain technical professions required natural aptitude and long-term dedication. The

transition from the Era of Order to the Golden Age often coincided precisely with a person's career trajectory from youth to renowned professional standing, making this the most opportune time to create wealth myths.

Politics during the Era of Order were generally clean. Because involution had not yet started and the wealth gap was small, people's pursuit of material possessions was relatively low. Individuals of excellent character found it easier to maintain integrity and were less compelled to relentlessly pursue fame and fortune.

The Arrival of the Golden Age (盛世, *Shèng Shì*)

The Golden Age differs from the Era of Order. It is often not a golden age for the common people, but rather a Golden Age for the State. This period is typically marked by economic prosperity, cultural flourishing, and harmonious foreign relations. The population is now nearing saturation, tax revenues are stable, and a massive bureaucratic class ensures sufficient consumption power. Sectoral specialization increases, talent emerges in all fields, and culture thrives.

The Tenant Farmer (佃农, *Diàn Nóng*)

As the population approaches saturation, new adult family members are unable to acquire new arable land and must internally compete for limited land resources within the family. Gradually, the relatively weaker members of the lineage, often those with distant blood ties (such as sons born to concubines), are expelled from the family's land. These laborers, stripped of land, are forced to seek sustenance by working for landlords—thus, the free peasants descend into becoming tenant farmers, and land annexation accelerates. The landlords at this time were typically officials and gentry families. Tenant farmers working the landlord's land could only earn bare subsistence, while the surplus grain became the landlord's wealth. China's two-thousand-year imperial history is fundamentally the history of the bureaucratic class exploiting the lower population via control of the land.

The Vagrant (流民, *Liú Mín*)

Worse still, the population continues to grow, and work opportunities for tenant farmers become increasingly subject to involution. A dire situation emerges when the landlord families have no more surplus land to offer. Vagrants—those without fixed land—become a class of unemployed itinerants, wandering from place to place. Some manage to find a way to survive through movement, becoming folk artists involved in opera, storytelling, and street performance. These individuals depend on the rich and powerful, driving the flourishing culture of the Golden Age. However, the majority of vagrants lead difficult lives and are forced to resort to beggary. Women from the lower classes are often compelled to enter prostitution, while men become bandits and robbers, surviving by plunder. This increase in crime and immorality leads to a deterioration of public security and an increase in the cost of governance.

From the start of the Golden Age, official corruption gradually becomes apparent. Involution is the main reason for the intensifying corruption. As the wealth gap widens and competition for talent intensifies, people are forced to resort to any means necessary for survival. Individuals begin to sacrifice morality, attack one another, form

factions, and deceit and intrigue become the norm. The initially clean and dedicated officials are gradually replaced by a new generation of corrupt ones. This overall decline in moral standards spreads from the bottom up, eventually infecting even the highest ministers around the Emperor. This process was particularly evident in the politics of the late Qianlong reign. History often attributes the decline of the Tang and Qing dynasties to the personal factors of Emperor Xuanzong and Emperor Gaozong, respectively. However, a careful study of these two periods reveals that this collective moral decay of the officialdom was a gradual erosion from the lower ranks upward. A key thread in the politics of the late Qianlong era was the struggle between decadent officials represented by Heshen and the upright second-generation officials represented by Liu Yong, Wang Jie, and Zhu Gui. By this point, the lower echelons of the bureaucratic system were already deeply corrupted.

Eunuchs, Factionalism, and Reforms

In the late stages of a unified dynasty, political corruption was severe and social contradictions were rampant. To maintain control over information, the emperor was often forced to utilize eunuchs and factional struggle (党争, *dǎng zhēng*) as means to check the power of his ministers.

The late Eastern Han Dynasty saw the Proscriptions of Partisans (*Dǎng Gù zhī Huò*), the late Tang Dynasty was marked by eunuch domination and the Niu-Li Factional Strife (*Niú Lǐ Dǎng Zhēng*). The late Northern Song Dynasty suffered from the New and Old Party Conflicts (*Xīn Jiù Dǎng Zhēng*), and the Ming Dynasty featured the Eastern Depot (*Dōng Chǎng*), the Western Depot (*Xī Chǎng*), and the Donglin Factional Strife (*Dōng Lín Dǎng Zhēng*). Observing the politics of later dynasties, eunuchs and factionalism provide two critical entry points for analysis.

To better understand this, let us imagine a scenario: One morning, the Son of Heaven is seated on his throne, with ministers arrayed on either side. He proclaims: “If there are matters, report swiftly; otherwise, the court may be dismissed.” At this moment, a minister steps forward from the ranks, presenting his case: “Your servant, the Minister of Personnel, has a matter to report: many officials in the court have already reached retirement age, leaving numerous vacancies. We urgently need to select new officials to fill these posts.” Having said this, he presents a memorial listing dozens of names. He continues: “These lower-level officials have been carefully selected and rigorously assessed by us, and are excellent in both virtue and talent. We request Your Majesty’s endorsement for their promotion by one rank each.”

At that moment, the Emperor holds the roster, speaking his anxieties silently: *Though I possess the power of decision, I am deprived of crucial information.* The roster contains many officials—some truly talented and learned, but certainly no lack of treacherous scoundrels; some who have paid heavy bribes, and others who are relatives of influential court ministers. *How can I decide amidst all this?*

The Emperor contemplates this for a long time and arrives at two methods:

1. Method One: Select a minister among the court officials who has the worst relationship with the Minister of Personnel. Present the roster to him and say: “You

must review this list in detail, to determine who is worthy of appointment and who is not. Do not rush; report back to me in ten days.”

2. Method Two: Establish a special Commandery Office responsible for highly confidential matters. The person in charge must not associate with any of the ministers, must maintain the utmost loyalty to me, and must also be incapable of manipulating power. The close attendant eunuch is the most suitable candidate for this grave responsibility.

When the first method is used frequently, **factional strife** gradually forms. When the second method is used excessively, it leads to **eunuch domination**. Some Chinese historical texts, such as the *Zizhi Tongjian* (Comprehensive Mirror to Aid in Government), often attribute the political decay in the late stages of dynasties to the emperor's moral character—for instance, favoring eunuchs. However, the reality is often that political decay existed first, forcing the emperor to rely on eunuchs. The presence of eunuchs and factionalism in the late dynasty was almost inevitable. For example, the Tang Dynasty had the Niu-Li Strife, the Song Dynasty had the New and Old Party Conflicts, and the Ming Dynasty had the Donglin Strife. Problems of eunuch domination also emerged in the Han, Tang, and Ming dynasties.

In the late stages of a dynasty, if a bold emperor and a responsible minister formed a unified front, an attempt might be made to reverse the decline. In Chinese history, this attempt is known as reform (*biàn fǎ*). Here, the author categorizes reforms into two types: 'Ineffective Reforms' and 'Effective Reforms'.

Ineffective Reforms

These reforms typically focused on the direction of "equal distribution of land." The emperor attempted to confiscate or purchase the land of the landlord class and redistribute it to the peasants. The outcome of such reforms was often that neither the landlords nor the peasants were satisfied, ultimately leading to widespread discontent. The most classic attempt in Chinese history was Wang Mang's Restoration and Reform (*Tuō Gǔ Gǎi Zhì*). The fundamental reason for the failure of these reforms is that they did not increase the population capacity per unit area of land. In fact, the root cause of social conflict in the late dynasty was not primarily the unequal distribution of land (which was merely a symptom), but the actual shortage of arable land. Resources that are not scarce, such as water and air, are not subject to unequal distribution. Conversely, the scarcer a resource is, the more likely it is to concentrate in the hands of the upper strata of society. Once land became a scarce resource, its unequal distribution was inevitable.

Effective Reforms

These reforms typically started by "changing the method of taxation." Specifically, this meant shifting from collecting a "poll tax" (*rén tóu shuì*) to a "land tax" (*tǔ dì shuì*). The poll tax was a form of income tax collected based on the number of able-bodied laborers in a household. The land tax, conversely, was a property tax collected based on the area of land owned by the household. The latter method of collection was technically more complex (basic land measurement was challenging with ancient technology), but if successfully implemented, it would greatly increase the population capacity that could be sustained on a given area of land, thereby alleviating land

pressure. This brief period of social contradiction relief is often labeled as a "Revitalization" or "Mid-Dynasty Revival" (*Zhōng Xīng*) by historians.

There have been three successful tax reform attempts in Chinese history:

1. The Two-Tax System (*Liǎng Shuì Fǎ*) introduced by Yang Yan during the Tang Dynasty, which led to the Yuanhe Restoration in the late Tang.
2. The Single Whip Law (*Yī Tiáo Biān Fǎ*) implemented by Zhang Juzheng during the Ming Dynasty, which led to the Wanli Restoration in the late Ming.
3. Apportioning the Corvée to Land (*Tān Dīng Rù Mǔ*) during the reign of Emperor Yongzheng in the Qing Dynasty, which extended the Prosperous Age of Kangxi, Yongzheng, and Qianlong for a full 120 years.

The first two tax reforms were only partially completed and implemented in a small portion of the country; the last one was promoted nationwide, significantly increasing the population during the mid-Qing period (another factor being the later introduction of potatoes and sweet potatoes, a topic that will be discussed later).

The Collapse of Dynasties

The end of a unified dynasty generally resulted from two factors: large-scale internal popular uprisings or invasion by northern nomadic groups. This chapter focuses primarily on the first factor; the relationship between agrarian and nomadic cultures will be discussed in our third lecture.

Multiple factors could trigger popular uprisings (*mín biàn*), including:

1. The arrival of a Little Ice Age: A drop in temperature led to reduced grain yields and an increase in starving people. This was a major cause of the uprisings in the late Tang Dynasty and a contributing factor in the late Ming.
2. Military pressure from northern nomadic peoples: This imposed severe fiscal crises on the dynasty. This was one of the reasons for the downfall of the Ming Dynasty.
3. Massive outflow of silver: (The silver drain caused by the Thirty Years' War in Europe was also a factor in the late Ming uprisings.)
4. Failure of internal reforms: (Such as Wang Mang's Restoration and Reform.)
5. The enthronement of a new emperor and a general amnesty: (Many peasant uprisings, such as those led by Huang Chao, Li Zicheng, and the Taiping Heavenly Kingdom, began in the first year of a new reign. General amnesties released prisoners who had neither land nor work, making their participation in rebellion highly probable.)

If these factors occurred in the early phase of a dynasty, they could be easily resolved. However, by the late dynastic period, when social contradictions were already extremely sharp, the superposition of accidental factors could make the situation irreversible.

Once a nationwide popular uprising erupted, the dynasty had reached the final moment of its life cycle. Why couldn't the dynasty's army defeat the peasant rebels?

The reason was not military capability, but finance. The bureaucratic system of a unified dynasty relied on stable tax revenue. Once a nationwide revolt occurred, local tax revenue could no longer be transported to the central government. The court would quickly plunge into a fiscal crisis, making it impossible to sustain the massive army, and the dynasty could not escape its eventual disintegration.

Based on how unified dynasties responded to popular uprisings, the author categorizes the collapse into two models:

1. The Eastern Han Model

In this model, the imperial court responded to the uprisings by decentralizing power. This meant the court permitted local officials, such as Provincial Governors (*Zhōu Mù*), Regional Commanders (*Fān Zhèn*), and Governors-General (*Xún Fǔ*), to raise their own armies to suppress the local peasant rebels. This approach was adopted in the late Han, late Tang, and late Qing dynasties. The advantage of the Eastern Han Model was that the old dynasty could exit the stage of history relatively gracefully. Peasant uprisings were often suppressed by local warlords, who then became autonomous, leading to mutual conflicts. The old dynasty's emperor was used as a puppet, and the old dynasty finally ended in a farce of imperial abdication (*shàn ràng*), with a new dynasty emerging from the chaotic order to begin a new cycle.

2. The Xin Dynasty Model

The Xin Dynasty here refers to the dynasty established by Wang Mang. Since the main social contradictions accumulated during the Western Han period, it can also be called the Western Han Model. In this model, the emperor resolutely refused to decentralize power. Consequently, local authorities could not suppress the uprisings, and the old dynasty ultimately ended with the conquest of the capital. The old dynasty was destroyed amidst brutal massacres, followed by peasant armies from various regions attacking and absorbing one another until a new unified dynasty was born. The collapse of the Xin, Sui, Yuan, and Ming dynasties followed this pattern.

Some Argument

At this point, we have roughly covered one full cycle. Below are three supplementary points:

Two Population Leaps

The population ceiling that could be sustained by arable land in ancient China continually shifted, and the area of cultivated land also increased due to improved production technology. Areas such as Guangdong, Guangxi, Yunnan, and Guizhou were gradually developed. New tools like water wheels, iron plows, and terraced fields also increased the yield per *mu* of land.

The two most significant population leaps in Chinese history came from the introduction of new crops.

1. The First Leap occurred in the late Tang Dynasty with the introduction of Champa Rice (*Zhàn Chéng Dào*). Champa rice was an early-ripening variety that allowed for two harvests per year, whereas rice before the Tang Dynasty was typically only one harvest per year. The introduction of double-cropping rice nearly doubled the food output in the Central Plains, increasing the land's carrying capacity from tens of millions to over 100 million.
2. The Second Leap occurred in the mid-Qing Dynasty with the introduction of the American crops sweet potatoes and potatoes. These new crops once again doubled China's land carrying capacity ceiling, reaching an unprecedented scale of 400 million. Apportioning the Corvée to Land and the introduction of sweet potatoes and potatoes were the two main reasons for the population surge during the mid-Qing Dynasty.

Other Forms of Resolving the Land-Population Conflict

The cycle of order and chaos is an important lens through which to view ancient Chinese history, but it is neither the sole perspective nor perfectly applicable to all Chinese dynasties. The Song Dynasty is an interesting case in point. The Song Dynasty never experienced a large-scale peasant uprising, though small-scale revolts were incessant. Over the three hundred years of the two Song Dynasties, there are records of over 400 peasant uprisings, each typically small in scale and short in duration. The Song Dynasty successfully resolved what would have been a massive late-dynasty peasant revolt by transforming it into numerous small-scale, short-term, regional conflicts.

This was closely related to the design of its conscription system. The Song Dynasty implemented a policy of "recruiting soldiers during famine years" (*huāng nián mù bīng*), massively enlisting vagrants into the military during times of disaster. These "hungry soldiers" solved the vagrant problem but simultaneously weakened the army's combat effectiveness, sowing the seeds for the eventual collapse of the two Song Dynasties.

The End of the Dynastic Cycle

The intractable cycle of rise and fall in ancient Chinese dynasties was inextricably linked to China's closed geographical conditions and its agrarian-based social structure. Agriculture is a zero-sum game. The grain output on a unit of land is finite; if one group occupies more production resources, it must come at the expense of exploiting another group. In contrast, industry and the service sector are non-zero-sum and can result in a win-win situation. Since over 90% of the GDP in ancient China came from agriculture, the inescapable cycle of dynastic rise and fall was inevitable. However, in a modern country, only about 10% of the GDP comes from agriculture, while 30% comes from industry and 60% from the service sector. Naturally, the dynastic cycle that governed ancient society ceased to exist after industrialization.

Chapter Two: Long Unity After Short Division

Administration Costs and Transaction Costs

Before discussing national unification, let us first introduce two closely related economic concepts: Administration Cost and Transaction Cost.

Administration Cost (Administrative Cost): The expenses incurred by an organization for management and administrative activities, such as managerial salaries, rent for administrative offices, and the cost of equipment and services.

Transaction Cost: All the various costs that must be paid to complete a transaction, including market research, information gathering, negotiation, contract signing, contract execution, supervision, and so forth.

In the vertical integration of an industrial chain, cost dictates the organizational form. When the administration cost is less than the transaction cost, a firm tends toward vertical integration, incorporating adjacent production stages into the same company. Conversely, when the administration cost is greater than the transaction cost, a firm tends toward specialization and connects various stages through market transactions.

We can apply this cost theory from economics to Chinese history, specifically concerning regional unification. A region will tend toward unification when the Administration Cost (Cost of Rule) is less than the Transaction Cost (Cost of War). Conversely, when the cost of agreements (or market exchange) is less than the cost of administration, a region is more inclined toward fragmentation.

Geographical isolation, cultural divergence, and linguistic differences undoubtedly all increase the administration cost. The difficulty of achieving unification in ancient Europe was precisely because the cost of doing so was prohibitively high—local languages and cultures varied greatly, and poor transportation meant the reach of governance could hardly extend. Similarly, India remained fragmented for a long period in the classical era. The towering Vindhya Range effectively cut the subcontinent in two; in ancient times with poor transport, crossing such a natural barrier effectively doubled the cost of rule. Another crucial factor is the sluggishness of information transmission.

In antiquity, relying on express riders and postal relays, an excessively vast territory inevitably led to low governance efficiency. Taking the Mongol Empire as an example: the Khan, far away in the capital, often could not receive timely intelligence on frontier battles. By the time the military dispatches arrived after a winding journey, the military opportunity had long been lost. Such a colossal empire was ultimately destined to disintegrate.

Geography, culture, and technological level are merely macro factors determining administration costs. Specific to any given period, political corruption can also exacerbate the burden of rule. Rampant official corruption and inefficient administration lead to internal friction. When this internal drain reaches a critical point, the regime can no longer sustain itself, and fragmentation follows.

In a state of fragmentation, the cost of coexistence among various regimes is transformed into the political "transaction cost." This expense can manifest as the catastrophic losses of war, the protracted negotiation required to conclude alliances, or even the risk premium associated with betrayal and deceit. War is unquestionably the most expensive form of transaction—the warlords vying for power in the late Han and the regional militarism in the late Tang led to perennial warfare, devastating livelihoods and sharply reducing the population. The common people, suffering from chaos and displacement, naturally yearned for national unification to end the turmoil.

For this reason, unified rule has always been the historical mainstream in ancient China. Meanwhile, the governance divided between the north and south along the Yellow, Huai, or Yangtze Rivers became a kind of "metastable state," capable of maintaining a relative balance for extended periods. This indicates that in both scenarios, the administration cost remained lower than the transaction cost resulting from fragmentation.

The scales of cost have always swung according to the weight of technology. Prior to the Spring and Autumn period, inconvenient transportation, slow cultural dissemination, and severe regional isolation meant that cultural, linguistic, and customary differences were significant, and economic ties were loose. Therefore, the administration cost far exceeded the transaction cost, making the feudal enfeoffment system (*fēn fēng zhì*) the most stable choice. King Wu of Zhou's implementation of the enfeoffment system instead of the prefecture-and-county system was a necessity—the journey from Haojing to the State of Qi was long, surrounded by "barbarians," and direct rule was simply impossible to achieve.

By the Warring States period, technological advancements completely reversed the situation. The buffer zones between states gradually disappeared, transportation became increasingly convenient, and administration costs steadily decreased, while transaction costs continuously climbed due to population growth and escalating conflict. After unifying the six states, Qin Shi Huang laid the foundation for national unification by implementing "same script, same track" (*shū tóng wén, chē tóng guǐ*) and standardizing currency and weights and measures, thereby drastically reducing administration costs.

Geographical Dependence

China's unification relied on the centralization of imperial finance.

The vast plains, dense river networks, and contiguous agrarian zones provided a natural advantage for the transportation of goods and the collection of taxes. This topography facilitated large-scale military campaigns but was detrimental to holding out in isolation. Once a warlord gained a resource advantage during a period of chaos, this edge would snowball, eventually forming an overwhelming force that ended the turmoil. Therefore, local separatism in China has rarely lasted long since the Qin Dynasty.

Within the vast Central Plains, only the Sichuan Basin (*Chuān Shǔ*) served as a true natural barrier for regional separation. Whenever the realm descended into chaos, it

became the "Land of Abundance" (*Tiān Fǔ zhī Guó*), sheltering local tranquility with its rugged terrain. However, once the Central Plains achieved great unification, the advantage of the Sichuan region quickly dissipated. The enclosed topography became a double-edged sword—it blocked external enemies but also limited internal development. Once the Central Plains dynasty integrated its resources, its talent pool, economic scale, and military strength presented an overwhelming advantage. The difficulty of the road to Shu (*Shǔ Dào*), in the end, could not withstand the magnificent force of a unified dynasty.

It is important to clarify that the "Great Unification" discussed here specifically refers to the core Central Plains region, whose scope roughly corresponds to the traditional territory of the Qin Dynasty or the late Ming. This land, rooted in agrarian civilization, stretched north to the Great Wall, south to the Five Ridges, east to the sea, and west to the desert. The winding outline of the Great Wall precisely coincides with the 300 mm isohyet of annual precipitation. Beyond this artificial barrier—the northern steppes, the Western Regions' Gobi Desert, the Northeast forests, and the Tibetan Plateau—could not sustain agrarian life. Precisely because the surrounding areas lacked arable land, even territorial expansion could hardly alleviate population pressure, thus naturally limiting the expansionist ambition of the Central Plains dynasties. Once the Central Plains was unified, the rulers typically turned to focus on internal governance.

This geographical constraint resulted in the regional dependence of Chinese culture. I use the term *regional dependence* here, rather than *inclusiveness*. In fact, the outward expansion capacity of Chinese culture has been highly limited. Taking the Western Regions (*Xī Yù*) as an example: although the Han, Tang, and Qing dynasties repeatedly incorporated the area into their territories, they never truly succeeded in getting the local people to "learn Han characters, wear Han clothing, and practice the ways of Confucius and Mencius." While the Central Plains dynasties briefly controlled the Mongolian grasslands and the Northeast, they were never able to truly achieve the goal of "transforming the barbarians into Chinese" (*yǐ Xià biàn Yí*). The rise and fall of the Western Liao Dynasty serves as a case in point—Yelü Dashi attempted to implement Han institutions in the Western Regions but ultimately could not sustain them. His son, Yelü Yilie, had to change course after succeeding to the throne, restoring local traditions.

Fundamentally, agrarian civilization is too heavily dependent on specific geographical environments. Once separated from the fertile soil of the Central Plains, the system of rites and music based on intensive cultivation could not be maintained.

The foundation of Chinese culture is deeply embedded in the Central Plains—the vast population base and complex hierarchical structure are prerequisites for the survival of this system. Just as the agrarian lifestyle was difficult to propagate outwards, heterogeneous cultures found it difficult to truly penetrate inward. The non-Han rulers who entered the Central Plains—from the Xiongnu and Xianbei to the Khitan, Jurchen, and Mongol—all eventually had to adopt the Han system of governance. This is the phenomenon known as "Sinicization" (*Hàn Huà*). The author will elaborate on the deeper mechanisms of this process in the next chapter on the relationship between North and South.

The optimization of administration costs is reflected in three aspects: logographic script, Confucianism on the outside and Legalism on the inside (*wài rú nèi fǎ*), and polydoxy (multi-deity belief).

Logographic Script

Another factor determining the cost of rule is the script. The form of the script has a profound impact on administration costs, and the fact that Chinese characters (Hanzi) did not transition to an alphabetic system for thousands of years was an inevitable choice dictated by the necessity of national unification in Chinese civilization.

Early writing systems such as cuneiform, hieroglyphs, Linear A, and Oracle Bone Script were initially presented as pictographic symbols. However, the Phoenicians pioneered the simplification of writing into an alphabet around the 16th century BCE, transforming writing from carving symbols to recording sounds. This revolution significantly reduced the cost of learning. An alphabetic script only requires mastering the letters and spelling rules; for example, the spelling and pronunciation of the English word "lamp" directly correspond. In contrast, Chinese characters require simultaneously memorizing the character shape, pronunciation, and meaning—a complex three-way relationship. This complexity kept literacy rates in ancient China consistently below 10%, as the average person could not afford the years required to memorize the form-sound correspondence of thousands of Hanzi.

Theoretically, alphabetic scripts are easier to popularize, but Hanzi maintained its logographic nature due to the considerations of administration cost. China is vast and has immense dialectal differences. If Chinese characters were to become alphabetic, each region would inevitably develop different spelling systems based on local dialects. For instance, the character *rén* (人, person) might be spelled "rén" in Beijing, but possibly "jàn" in Guangzhou, and "lîn" in Fujian. This would necessitate translating central government decrees into multiple written versions, leading to a sharp drop in administrative efficiency and a surge in management costs.

The core advantage of Chinese characters lies in their ability to convey meaning directly, transcending speech sounds. Regardless of how the character *rén* (人) is pronounced across different regions, its written form remains consistent. This ensured that government decrees, classical texts, and the Imperial Examination System could circulate smoothly across the entire nation without depending on linguistic unification.

This characteristic is corroborated by evidence from the peripheral regions of the Sinosphere. Japan, Korea, and Vietnam all attempted to introduce partial or full alphabetic systems:

- Japan adopted *kana* (syllabaries) to aid Hanzi but still relies on characters to ensure semantic accuracy.
- Korean (Hangeul) is entirely alphabetic but faces issues with homonyms (words that sound alike but have different meanings), requiring Hanzi annotation in important contexts.
- Vietnamese *Chữ Nôm* was eventually replaced by the Latin-based alphabet, but semantic ambiguity issues persist.

These regions were able to implement alphabetic systems precisely because they were not incorporated into the Central Plains system of Great Unification and did not have to bear the cost of cross-dialect governance. It is thus evident that Hanzi's failure to become alphabetic was not due to backwardness, but because within the framework of national unification, the logographic script incurred the lowest overall administration cost. While an alphabetic script is easier to learn, it would have led to administrative fragmentation due to dialect differences. Conversely, although Hanzi is more difficult to master, it ensures the unity of government decrees, culture, and education across the entire nation—the fundamental reason why the Chinese character became the invisible pillar sustaining the Great Unification of Chinese civilization.

The Axial Age

The theory of the Axial Age, proposed by German philosopher Karl Jaspers, reveals a compelling phenomenon: between roughly 800 BCE and 200 BCE, the great ancient civilizations clustered around the 30th parallel north simultaneously experienced a major intellectual explosion. China saw the flourishing of the Hundred Schools of Thought (*Zhū Zǐ Bǎi Jiā*), India developed the philosophy of the Upanishads, Persia saw the rise of Zoroastrianism, and Greece gave birth to Classical Philosophy.

The background to this phenomenon is subtly congruent with the internal logic of civilizational development.

- **Material Basis:** This period was a critical transition from the Bronze Age to the Iron Age across the Eurasian continent. Advances in hydraulic engineering and agricultural technology created a considerable surplus of wealth, which allowed a segment of the population to be released from heavy physical labor and dedicate themselves exclusively to intellectual pursuits.
- **Political Catalyst:** The expansion of ruling territories also compelled the ruling class to systematically contemplate the principles of governance for vast regions, providing fertile ground for the efflorescence of philosophical thought.

On the other hand, this period was immediately followed by the establishment of unified empires: China transitioned from the Warring States period into the Qin and Han Empires, India saw the rise of the Mauryan Empire, and Europe was dominated by the Roman Empire.

These newly formed unified empires needed to find a cultural foundation for ruling their vast territories and naturally sought this foundation within their respective local histories. To what extent, then, were the sage-like philosophies, which were later canonized and revered, the result of a conscious selection and reinforcement by subsequent rulers?

Taking China as an example, the schools of Yang Zhu and Mo Di (Mohism) were once widely popular during the Warring States period, but ultimately, it was Confucianism and Daoism that emerged as the mainstream. This selective outcome was clearly linked to the governance needs of the Qin and Han dynasties. The development of intellectual history often demonstrates such a dialectical relationship: thought is both

a response to the problems of its time and simultaneously molded by later power structures, ultimately becoming the cultural bond that sustains national unification.

Confucianism on the Outside, Legalism on the Inside (外儒内法)

The governance wisdom of the Chinese imperial dynasties is indeed embodied in the masterful balancing act known as "Confucianism on the outside, Legalism on the inside" (*wài rú nèi fǎ*). The Qin Dynasty, relying purely on Legalist doctrine, maintained its rule through severe laws and harsh penalties, yet the dynasty collapsed after only two generations. The Legalist approach was flawed because it failed to account for the cost of rule. Relying solely on the manipulation of rewards and threats incurs extremely high costs.

The rulers of the early Han Dynasty learned this lesson and creatively fused Confucian ethics with Legalist statecraft: Confucian benevolence and morality served as the external facade to lower the cost of persuasion, while Legalist principles of penalties and governance techniques ensured the effectiveness of the rule. This dualistic model of governance was a brilliant design for reducing the overall cost of administration. The doctrines of Confucius and Mencius draped a cloak of warmth over autocracy, while the techniques of Shen Buhai and Han Fei provided the practical guarantee of power.

Successive emperors mastered this art, exploiting moral discourse as a governance tool to its fullest extent. In court, "benevolent governance" and "loving the people" were mandatory talking points, and memorials were filled with references to the legendary sages Yao and Shun. Yet, the actual operation of the government was subtly laced with principles of checks and balances. This art of discrepancy between appearance and reality created the unique tradition of "openly Confucian, secretly Legalist" in Chinese political history. This tradition established the central theme of Chinese history, where a close reading of the Twenty-Four Histories reveals an endless struggle: ruler vs. ruler, minister vs. minister, and ruler vs. minister.

Stratified Governance and Self-Management

The "Confucian facade, Legalist core" system established in the Han Dynasty creatively built a stratified governance structure: the central government used Legalist statecraft to maintain overall control, while local governance relied on Confucian ethics to achieve a degree of self-management. The genius of this institutional design lies in its full utilization of the clan society's self-management functions, transferring the highly resource-intensive task of grassroots governance to the local gentry class.

As depicted in the novel *White Deer Plain*, the clan rules and folk conventions within the ancestral hall, along with the moral arbitration by village elders, formed a dispute resolution mechanism independent of the official judicial system. This model showed astonishing adaptability during the agrarian civilization stage—it used the simplest moral codes (such as the Three Cardinal Guides and Five Constant Virtues) to address the most complex grassroots conflicts. Although the methods might appear crude, they achieved basic social stability under the constraint of low administrative costs.

Institutional Economics Perspective

From the perspective of Institutional Economics, the emergence of this governance model was closely linked to the prevailing social conditions. In the pre-industrial era, when per capita resources were extremely scarce, society was compelled to develop highly stylized behavioral norms to reduce transaction costs. Whether it was the ecclesiastical law in Europe, the caste system in India, or the clan ethics in China, the essence was the same: using simple, one-size-fits-all rules to replace complex judicial procedures. These rules often appeared under the guise of religion or morality, but their core was a necessary choice dictated by resource constraints.

With the leap in productivity brought by the Industrial Revolution, as society became capable of affording the costs of more sophisticated governance, these traditional norms gradually began to show their inadequacies. The structural transformation of contemporary Chinese society is fundamentally a continuation of this historical logic—when economic development causes individual resource possession to exceed a critical threshold, the traditional governance model built on the assumption of scarcity must give way to modern institutions that place greater respect on individual rights. Although this process has been accelerated by unique historical conditions, its intrinsic driver is the unavoidable restructuring of governance costs during the process of modernization.

Buddhism and Daoism

Confucianism and Legalism concentrated on the arrangement of secular order (*xiàn shì zhì xù*), effectively ceding the domain of ultimate concern (*zhōng jí guān huái*) to Daoism and Buddhism.

Early forms of human religion universally exhibited polytheistic characteristics, a phenomenon rooted in the primitive mind's way of understanding the natural world. From the Sumerian pantheon in Mesopotamia to the Olympian gods of ancient Greece, from the Norse Æsir to the Mayan nature deities, polytheism reflected the *primal belief in animism* (*wàn wù yǒu lín*). This explanatory system, which personified natural phenomena—thunder was interpreted as the wrath of the Thunder God, and a bountiful harvest as the favor of the Agricultural Deity—was essentially a rationalized construction of the unknown world. This concrete mode of cognition satisfied humanity's psychological need for certain explanations.

As civilization advanced, this primitive polytheism gradually diverged into two more systemic religious paradigms:

1. One emphasizing ultimate judgment of worldly actions: *Believe in me, and go to heaven after death.*
2. One focusing on karmic retribution through reincarnation: *Believe in me, and be rich in the next life.*

The formation of these spiritual systems followed a pragmatic logic. The geographical environment determined the primary contradiction of the ruling power, and cultural selection revolved around the core demand of reducing the cost of rule.

In the Western Eurasian landmass, due to the fragmentation of the geographical landscape, warfare became the main way to resolve resource contradictions. The doctrine of "sacrifice for the faith" in monotheism perfectly met the needs of military mobilization; believers were convinced that sacrificing for the religion would grant eternal life in paradise. This belief system showed immense adaptability in an environment of sustained conquest; those peoples lacking this religious capacity for mobilization were often eliminated in the competition.

Conversely, in East Asia, the enclosed geographical unit meant that after achieving unification, the Central Plains dynasties' governing focus naturally shifted toward internal stability. Buddhist concepts of reincarnation and karma offered psychological solace to the lower classes facing social injustice, while Daoist ideas of non-action (*wú wéi*) provided a spiritual retreat for the disheartened. Neither of these belief systems challenged secular authority; instead, they became important auxiliaries for maintaining social stability.

Chapter Three: Southern Farming, Northern Herding

Cultural Differences

In a biological food chain, the levels are sequentially: Producers (plants), Primary Consumers (herbivores), Secondary Consumers (carnivores), and higher-level consumers (predators of carnivores). Generally, the efficiency of energy transfer between two trophic levels is less than 10%, causing the food chain structure to shrink upwards in a ratio of 100:10:1. Taking the chain "Grass → Rabbit → Snake → Eagle" as an example, if a grassland can support 1,000 rabbits, it can support a maximum of 100 snakes and 10 eagles.

From the perspective of ecological energy transfer, the organizational structure of human society indeed exhibits tiered characteristics similar to the food chain.

- In the agrarian zone south of the Great Wall, people act as primary consumers, directly ingesting plant energy. This energy utilization method supports an extremely high population density.
- In the northern steppes, nomadic peoples function as secondary consumers, obtaining energy indirectly through livestock. The inherent loss in this energy transfer naturally maintains their population size at a lower level.

This population density disparity, which is based on the mode of energy acquisition, shaped the drastically different civilizations of the North and the South.

The agrarian empire south of the Great Wall possesses contiguous plains, resulting in a concentration of population and wealth in the Central Plains that was unique in the ancient Eurasian world. The imperial government extracted resources from this massive population base, forming a vast bureaucratic system and a centralized treasury.

The large population brought positive aspects: the enormous consumer base led to the professionalization of occupations and detailed division of labor. Besides agriculture, large numbers of people clustered around the upper class to seek a living, which was reflected in the flourishing of culture and the prosperity of the economy. Various specialized skills could find their niche, and philosophers, artists, and literary figures emerged continuously.

However, the enormous population also brought negative aspects: Severe involution resulted in fierce competition, giving rise to various forms of "moral depravity." When there are too many talented people, fair competition is difficult to ensure. Over time, officials often engaged in deceit, mutual rivalry, factionalism, and deceiving superiors while oppressing subordinates. The common people often preyed on their own kind, protected themselves above all, and feared the powerful and the untrustworthy. It is worth noting that this "national flaw" (*liè gēn xìng*) is not unique to the Chinese people but a universal characteristic of all high-density agrarian civilizations, a point attested to by the calculating nature inherent in the Indian caste system and the deviousness of Arab court politics.

Compared to the southern agricultural empire, the northern nomadic peoples were far simpler. In stark contrast to the order logic of the Central Plains, insufficient rainfall on the steppe meant that nomadic herding was the primary means of subsistence. Nomads moved with the water and grass, leading to a highly mobile lifestyle that prevented the formation of stable tax revenues. Consequently, the necessary central treasury and bureaucratic system could not be established on the steppe. The relatively sparse population led to the relative backwardness of culture and commerce; a survey of ancient Eurasian philosophical and scientific progress shows few contributions from nomadic peoples.

Nevertheless, compared to the South, the nomadic peoples retained more of an inherent, traditional self-order. Interpersonal relationships were relatively simple, and the social structure was more decentralized. This relatively simple social relationship meant that the northern nomadic peoples, to some extent, avoided the fierce competition and moral issues found in southern society, allowing people to maintain a comparatively simple and unsophisticated lifestyle.

The *Records of the Grand Historian: Account of the Xiongnu* records a dialogue between a Han envoy and Zhonghang Yue, which vividly illustrates the cultural differences across the Great Wall. The Han envoy remarked: "Among the Xiongnu, father and son sleep in the same felt tent. When the father dies, the son marries his stepmother; when brothers die, the surviving brother takes their wives. They lack the adornment of caps and belts and the rituals of the court." Zhonghang Yue retorted: "The custom of the Xiongnu is that men eat animal meat, drink their milk, and wear their skins; the animals eat grass and drink water, moving according to the seasons. When they face urgency, men are skilled in riding and archery; in times of peace, they are happy doing nothing. Their laws are lenient and easy to follow. Relations between ruler and minister are simple; the governance of the entire nation is like the command of a single body. When father and brother die, the surviving male marries their wives to prevent the loss of the bloodline/seed (*è zhǒng xíng zhī shī yě*). Thus, even when the Xiongnu are in chaos, the ruling clan is always established."

This shows a great difference in attitude toward women between the empire and the steppe. For the emperor of the Southern Empire, female resources were virtually limitless; after the death of the old emperor, the new emperor could widely recruit beautiful women to fill his harem. The old concubines were either sent to guard the tomb or placed in monasteries—euphemistically justified by ethical principles, but utterly devoid of human compassion. For the Northern Nomadic people, female resources were limited. Once a woman was taken in by the Khan, she had to be cared for until the end; the practice of a son or brother marrying the deceased man's wife was to continue supporting the woman until her old age. Compared to the Southern Empire, the steppe civilization's attitude toward women, while seemingly violating ethical principles, demonstrated a more natural form of humanity.

Governing Methods

The differences between North and South in ancient China were not just cultural but deeply reflected in their governing methods. The Southern Central Plains Empire

exhibited powerful central authority, while the Northern Nomadic Empires formed a unique system of military aristocracy democracy.

In the Southern Empire, the capacity for centralization was immense. The emperor, as the ruler, could mobilize the entire empire's resources to complete various construction projects and military actions. Under this centralized order, ambitious rulers, leveraging the vast resources at their disposal, could push forward large-scale projects and military plans in a short time.

However, this high centralization also came with potential problems, notably in the relationship between the emperor and his military generals. Despite the scale of its population, the combat strength of the Southern Empire was often lower than that of the North, partly because the generals were constrained by the emperor's suspicion. A pattern in ancient China is that once military power fell into the private hands of a general, combat effectiveness increased significantly. Taking the Song Dynasty as an example: the Northern Song's official army was easily defeated by the Jin forces in 1124 CE, yet just ten years later, in 1134 CE, the army of Yue Fei in the Southern Song could fight on equal terms with the Jin forces. Famous military commanders in Chinese history, from Li Mu to Zhou Yafu, and from the Yue Family Army to the Qi Family Army, were all characterized by the saying: "The soldiers only knew the Marshal, not the Court."

Private control of the army was precisely what the emperor most feared. Emperor Jing of Han dismissed Zhou Yafu after the Rebellion of the Seven States, and Emperor Gaozong of Song executed Yue Fei after the Shaoxing peace talks—both were attempts to prevent military men from interfering in politics. This nationalization of the army undoubtedly greatly weakened its combat effectiveness. The Southern Empire simultaneously needed strong military power to defend its borders and needed to constantly guard against generals rebelling. Thus, the Emperor's attitude toward generals swung between support and suspicion, causing military authority to repeatedly change hands in this cycle of contradiction.

Conversely, the governing method of the Northern Nomadic Empire featured a military aristocracy democracy. Due to the needs of warfare, military power was consistently held privately to ensure optimum combat strength. Though the tribal leader had the duty to lead the tribes collectively, he could not make all decisions autocratically. High-ranking generals within the tribes held significant influence. The Khuraltai council for electing the Khans of the Mongol tribes and the Eight Princes Council of the Qing Dynasty before entering the Shanhaiguan pass are concrete manifestations of this military aristocracy democracy. In these councils, every military noble had a voice, and the Khan or Emperor needed to listen to all sides, forge consensus, and ensure decisions were widely understood and accepted.

The military aristocracy democracy was not without flaws. Compared to the Southern Empire, the northern nomads were more prone to internal strife and fragmentation. For example, the Xiongnu in the late Western Han, the Xianbei in the late Eastern Han, the Turks in the early Tang, and the Mongols in the Ming Dynasty's northern desert all declined when squeezed between the Southern Empire and emerging steppe powers, eventually being replaced by a new steppe hegemon.

The Central Plains and the steppe also exhibited distinct characteristics in their succession systems. In the Central Plains Empire, governance was accomplished by a vast bureaucratic system. This system ensured the regularity and orderliness of imperial governance. The individual capability of the heir was secondary; the primary factor was maintaining the stability and standardization of imperial succession. This need ultimately converged on patrilineal succession, particularly the primogeniture rule (succession by the eldest legitimate son).

In contrast, succession rules in the steppe regions reflected a different logic. A small child could not ensure combat prowess, and in the steppe empire, powerful combat strength was the core factor maintaining the stability of the tribal alliance. Therefore, the succession rule for leaders was typically fraternal succession (older brother succeeded by younger brother), ensuring the leader was always a capable adult possessing strong fighting ability. However, once all the brothers of the founding Khan's generation passed away, the choice of a successor became complex and difficult. Multiple nephews and sons often vied for the Khanate, which frequently led to the fragmentation and civil war of the tribal alliance, constituting the cyclical succession crisis of the steppe empires.

Willingness to Wage War

The Southern Agrarian Empire has always been the center of Chinese civilization in ancient times, its development based on fertile land, abundant water, and advanced agriculture. However, in terms of the North-South relationship, the Southern Empire mostly played the defensive role. To guard against northern invasions, the Southern Empire even built the Great Wall and stationed large numbers of troops along its line. This pattern of North attacking, South defending reflects drastically different willingness to wage war.

For the South, the willingness to launch punitive expeditions against the steppe was low, lacking a strong incentive for war.

- First, the direct dividends of war were limited. The Great Wall marked the limit of the agrarian zone; lands beyond the Wall were difficult to farm, could not sustain stable taxation, and could not be governed by the bureaucratic state system. For the South, even a successful military action would only yield some livestock, which was incomparable to the costs of military mobilization.
- Second, the Southern Empire was more focused on civilizational development and internal governance. Agrarian society was highly sensitive to the cost of war; maintaining a large army deep in the desert was prohibitively expensive, and protracted warfare could cause irreversible damage to agricultural output and social order.

In contrast to the South, the Northern Nomadic peoples had an extremely high willingness to wage war. This phenomenon is related to several factors. The northern steppes are vast, resource-scarce, and have a simple product structure. The relatively barren natural environment made the North unable to be self-sufficient. The northern steppes urgently needed the South's abundance of grain, fruit, silk, and other resources, but could not provide attractive goods for exchange. This forced the

northern nomadic peoples to acquire necessary resources through plunder. Plunder was almost always a guaranteed profit strategy. Advancing south along the Great Wall maximized the mobility of the cavalry. Successful plundering yielded valuable grain, silk, and even women. Even an unsuccessful raid often allowed for a safe withdrawal.

The intensity of the North's willingness to wage war is evident in the conflicts between the Eastern Han and the Xiongnu. Starting from the submission of the Southern Xiongnu Chanyu Huhanye (not the one who married Wang Zhaojun) in 48 CE, up to the Southern Xiongnu's allegiance to Emperor Xian in 202 CE, the general logic of the conflict was: *Southern Xiongnu submits to Han → Southern Xiongnu rebels → Southern Xiongnu submits again → Southern Xiongnu rebels again → Southern Xiongnu submits yet again → Southern Xiongnu rebels again...* It was endless.

In 89 CE (Yongyuan 1st year of Eastern Han), Dou Xian decisively defeated the Northern Xiongnu at Mount Yanran, and Ban Gu inscribed the victory on the rocks of Yanran. Even such a large-scale victory only secured 30 years of peace on the northern frontier. Thirty years later, the generation of Xiongnu who had been defeated passed away, the Southern Xiongnu rebelled once more, and raiding from the steppe resumed. The reason for this relentless cycle is the sheer intensity of the northern peoples' willingness to wage war.

The low war willingness of the Southern Empire does not imply low combat effectiveness. In fact, if both sides committed fully, the South was slightly stronger, given its advantage in population and resources. The Southern Empire typically avoided large-scale, costly northern expeditions unless severely provoked. However, once the unified Southern Empire took the threat seriously and launched a counterattack with the resources of the entire nation, the northern nomadic peoples suffered the consequences. Northern expeditions by Emperor Wu of Han and Emperor Taizong of Tang were essentially defensive counterattacks, triggered by persistent northern harassment that forced the South to seriously address the border issue.

Although large-scale northern expeditions by the Southern Empire could temporarily curb the steppe's harassment, they could not fundamentally solve the northern border problem. Even when an emperor, like Han Wu Di or Tang Taizong, devoted the nation's resources to eliminate the main cavalry forces of the North, it was difficult to establish effective rule over the steppe tribes. The ultimate beneficiaries were often the emerging forces of the steppe peoples. For example, the constant warfare between the Eastern Han and the Xiongnu ultimately benefited the Xianbei tribe led by Tan Shihou, who "occupied all the former Xiongnu territory."

Beyond the vast difference in war willingness, some scholars analyze the North-attack, South-defend phenomenon from the perspective of human quality and technological level. In the author's view, the differences in technology and physical fitness were not significant. While the northern nomadic peoples, raised on horseback, were naturally skilled in riding and archery and seemed slightly superior in fighting ability, the South benefited from its large population and immense mobilization capacity, making it feasible to organize formidable armies. Furthermore, the route of technological diffusion across Eurasia was generally from the Middle East eastward along the steppe; some advanced technologies, such as iron stirrups and the saddle, did spread from the steppe to the Central Plains. However, ancient society developed relatively

slowly, allowing technology to remain stable for a period, unlike the rapid technological iteration of modern times, so the advantage of the supposedly more advanced side was not substantial.

In contrast to the Southern Empire's full-scale northern campaigns, the sustained pressure exerted by the North on the South often had unexpected gains. As mentioned, during periods of Southern unification, the nomadic peoples could not conquer the South; they could only manage continuous harassment and plundering of border regions. However, agrarian civilization had an irresistible cyclical pattern. Once the Southern Empire fell into fragmentation and turmoil, the northern nomadic peoples often seized the South's vulnerable period of division to enter the Central Plains. Once the nomadic peoples secured long-term, stable occupation of the land south of the Great Wall, it became very difficult for the Han regime to reclaim it. The phenomenon of northern nomadic groups ruling the Central Plains has been repeatedly played out in Chinese history.

Divided Rule Along the River (划江而治, *Huà Jiāng Ér Zhì*)

If Great Unification is the stable state of Chinese history, then North-South division is its metastable state. North-South division usually results from the Southern Empire's cyclical collapse of order compounded by persistent northern invasions. The chaos of the Sixteen Kingdoms followed the political disintegration after the Eight Princes Rebellion in the Western Jin; the loss of the Sixteen Prefectures of Yanyun stemmed from the warlordism of the late Tang; and the Qing entry into Shanhaiguan originated from the internal collapse of the Ming Dynasty's order.

In principle, once a northern people established rule in the Central Plains and gained access to the highly valuable agrarian zone, their willingness to wage war would decrease. Having stable agriculture and tax revenue meant the upper class could live comfortably without constant plundering. In this context, southern campaigns still occurred but were not particularly urgent. As previously mentioned, nomadic rule was relatively decentralized, and military power was not solely held by the Khan. Other imperial relatives and neighboring tribal leaders shared the military burden.

Once nomadic peoples ruled the Central Plains, the urgent task became how to centralize military power and complete the transition from a military aristocracy system to a centralized autocracy. The transfer of power in the first few generations after nomadic conquest was particularly difficult. After Kublai Khan's death, the Mongol regime (Yuan Dynasty) saw power repeatedly change hands among various factions. In the early Qing Dynasty, the succession struggle—from the contest between Dorgon and Hooqe to the Nine Princes' Rivalry in the late Kangxi era—took nearly a century to truly stabilize. The reason for this lay in the undiminished power of the former steppe military nobility, where different military blocs often supported different heirs to the throne (usually those related to them through marriage).

Simultaneously, the new Emperor, seeking to shake off the control of the old military nobility, often implemented a series of Sinicization reforms (*Hàn Huà gǎi gé*). Common strategies included moving the capital, appointing Han officials to key posts, and re-opening the Imperial Examination System. While these measures appeared to the

South as Sinicization, the Emperor viewed them as a means to rule the barbarians with Han methods and balance power. These reforms benefited national governance and the Emperor's personal power, but they were detrimental to the interests of the original military nobility. Therefore, Sinicization reforms could not proceed too quickly; an accelerated pace would lead to backlash from the old forces. The Northern Wei's Sinicization was too rapid and radical, ultimately leading to the Rebellion of the Six Garrisons. Subsequent emperors of the Liao, Jin, Yuan, and Qing learned this lesson, practicing Sinicization with restraint, preserving their native religion and language while modifying the bureaucratic system. Beginning with the Liao Dynasty, the political system adopted a dual governance model (North and South Bureaus), applying "the laws of their own people to govern the Khitan, and the Han system to treat the Han people." This system was inherited and developed by the later Jin, Yuan, and Qing dynasties.

On the other hand, the Han regimes forced to flee south (*yī guān nán dù*) desperately hoped to recover their lost territories, but this conviction typically lasted only one generation. When the first generation of northern immigrants passed away and the second generation, who grew up in the South, took power, the Han regime often had to align itself with the southern gentry and literati society to secure legitimacy, leading to a reduced desire for northern campaigns. Northern expeditions in this context often became more of a political stance and a tool for power struggle within the court. Taking the Eastern Jin as an example: the northern campaign of Zu Ti's generation was a genuine attempt to recover lost land, but later campaigns by Huan Wen and Liu Yu were primarily driven by the needs of internal court conflict. The Southern Song was similar; Yue Fei's Shaoxing Northern Expedition was a genuine attempt at recovery, but the later Longxing and Kaixi Northern Expeditions lacked crucial support from key court officials, were controversial even at the time, and naturally failed to succeed.

When the willingness to wage war declined on both sides and the strength of the two sides was roughly equal, this divided rule along the river could be maintained for a long period. An interesting 'coincidence' is that the result of both historical stalemates was the unification of the South by the North. A decisive factor behind this phenomenon is the seemingly inconspicuous warhorse! If ancient infantry is comparable to modern light weapons, then cavalry is comparable to modern armored units. Cavalry's high mobility and open-field combat capabilities surpassed those of infantry, meaning that when the two met, the infantry was primarily relegated to defence. Historically powerful Chinese dynasties, whether the Han conquering the Xiongnu or the Tang conquering the Turks, developed cavalry tactics to their ultimate effectiveness. Conversely, historically weak dynasties, such as the Jin and Song, primarily relied on infantry for defence.

Cavalry requires warhorses, but unfortunately, most of the Central Plains lacked suitable land for breeding good horses. The only two locations were the Sixteen Prefectures of Yanyun and the Hetao region (Ordos Loop). Both were situated right next to the Great Wall. Therefore, once the northern nomadic peoples crossed the Great Wall and controlled these two regions, the Southern Han civilization was essentially forced into passive defence. Furthermore, raising horses in the agrarian zone consumed already scarce land resources and was extremely costly. Thus, the Great Wall became the lifeline of the Chinese nation. Once the nomadic peoples crossed the Wall, the result of the protracted conflict was that the Southern Empire

gradually shrunk—its northern border retreated from the Yellow River to the Huai River, and then gradually fell back to the Yangtze River, eventually leading to unification by the North. This is how both the Eastern Jin and the Song Dynasties were gradually consumed by northern peoples.

Unifying North and South, Qing Dynasty

Although the rulers of the Han, Tang, and Yuan dynasties made numerous attempts, it was the Qing Dynasty that truly achieved the breakthrough and completely unified the nomadic and agrarian zones. The Qing Dynasty's success in unifying the land north and south of the Great Wall stemmed from several factors:

Creation of a "South-Nourishes-North" Fiscal-Military System: This institutional innovation fundamentally resolved the governing dilemma that previous dynasties faced in trying to simultaneously manage the agrarian and nomadic zones. In terms of military deployment, the Qing court stationed elite Eight Banners troops in key northern strategic locations; the Banner soldiers became a professional military force generation after generation. The salaries and provisions for these garrisoned troops were entirely dependent on the financial support and taxation from the southern provinces. Through the Grand Canal and the postal relay system, tax silver from Jiangnan and rice from Huguang were continuously transported northward. According to statistics from the Qianlong reign, the single province of Jiangnan bore nearly one-third of the national taxes. This southward transfer of wealth provided the material basis for maintaining frontier stability.

Active Reshaping of Nomadic Society and Religion: The Qing Dynasty further consolidated its rule over the northern frontier by actively adjusting the religious structure and social organization of the northern nomadic groups. The Mongols and other northern tribes, who originally practiced Shamanism, were gradually guided toward Tibetan Buddhism. This religious conversion was not just a change in faith but a remodelling of the traditional steppe lifestyle. For more effective governance, the Qing divided the original twenty-odd large tribes into over 260 Banners (*qi*), cutting the formerly loose tribal alliance into more manageable administrative units. Simultaneously, the Qing court constructed monasteries within each Banner, making Tibetan Buddhism the new spiritual centre and organizational bond of steppe society. The appearance of monasteries changed the way of life from the Shamanistic era, which involved "seasonal migrations and arbitrary movement," causing nomadic activities to gradually centre around the temples, forming relatively stable, small-scale grazing circles. The monasteries became the core of social life, religious rituals, and even local politics, allowing the central government to indirectly influence grassroots affairs through the religious system.

Flexible Policy of "Governing According to Local Customs" (*Yīn Sú Ēr Zhì*): In its governing model, the Qing Dynasty adopted a flexible policy. It continued the traditional system of Imperial Examinations and Prefecture-County governance in the South; it retained the Banner-League system (*méng qí zhì dù*) in the Mongolian regions, recognizing the privileges of princes and nobles; and in Tibet, it practiced co-governance through the Resident Commissioner (*Zhù Zàng Dà Chén*) and the Dalai Lama. This pluralistic governance structure significantly lowered the cost of rule,

allowing different ecological zones to maintain relative order. The Qing Dynasty also established a sophisticated mechanism for balancing interests. It maintained emotional ties with the steppe nobility through Manchu-Mongol intermarriage and activities like the Mulan Hunting Grounds; it met the economic needs of various parties through tea-horse trade and tribute trade; and it spiritually integrated the diverse cultures through the promotion of Tibetan Buddhism. This comprehensive strategy of integration enabled different ethnic groups to find their place within the imperial system.

The successful operation of these institutions allowed the Qing Dynasty to maintain the stability of its vast territory at a relatively low cost. During the Prosperous Age of Kangxi and Qianlong, the court's annual income was about 40 million taels of silver, of which less than one-tenth was spent on frontier garrisons. This cost-benefit ratio was unattainable by previous dynasties.

Chapter Four: The Three Worlds

Simple Historical Periodization

Throughout the history of human development, two pivotal turning points fundamentally reshaped our way of life: the Agricultural Revolution about twelve thousand years ago and the Industrial Revolution two centuries ago. These two revolutions divide human civilization into three distinct eras, each characterized by a unique mode of energy acquisition and production organization.

The First Era: The Foraging and Hunting Age (From Human Emergence to ~10,000 Years Ago)

This lengthy period, which accounts for 99% of human history, saw our ancestors survive in nature using stone tools and group cooperation. Around twelve thousand years ago, with the end of the Quaternary Glaciation and a significant global temperature rise (followed by the brief Younger Dryas period), humans moved out of the forests and began cultivating food crops on the vast plains. Replacing foraging and hunting with agriculture was the first milestone in human history; this Agricultural Revolution enabled humans for the first time to acquire survival resources by actively transforming the natural environment. The emergence of settled agricultural villages laid the foundation for later urban civilization.

The Second Era: The Agrarian Civilization Age (10,000 Years Ago to the 18th Century)

With the appearance of cultivated crops and domesticated animals, humans began actively transforming the environment. This ten-thousand-year period can be subdivided into three technological stages:

1. Neolithic Age (Polity Stage): Marked by polished stone tools and pottery, leading to settled villages (e.g., Jiahu Site, Hemudu culture).
2. Bronze Age (Kingdom Stage): Metallurgy gave rise to urban civilizations (Sumerian city-states, Erlitou culture) and the birth of writing systems. Various philosophical schools emerged.
3. Iron Age (Empire Stage): Improvements in farm tools drove massive population growth (the Roman Empire reached 60 million, and the Han Dynasty nearly 60 million). Large empires spread across Eurasia.

We group the Neolithic, Bronze, and Iron Ages together as Agrarian Civilization because they share a series of fundamental characteristics that constitute a development paradigm distinctly different from Industrial Civilization. From an economic structure standpoint, agriculture always held absolute dominance; in ancient China, over 95% of the population was directly engaged in farming, and agriculture contributed about 90% of the social wealth. This industrial structure was common across various Eurasian civilizations.

The Third Era: The Industrial Civilization Age (18th Century to the Present)

The Industrial Revolution, which began in 18th-century Britain, fundamentally altered this ten-thousand-year-old development model. The revolutionary changes were manifested in:

1. **Energy Revolution:** The roar of the steam engine signaled humanity's mastery of the enormous power of fossil fuels, leading to an exponential increase in production efficiency.
2. **Industrial Transformation:** Britain was the first country to see its agricultural population drop below 50% in 1850. Modern economies formed a new industrial structure: services contributing 60%, industry 30%, and agriculture 10%.
3. **Knowledge Explosion:** The speed of knowledge renewal grew exponentially. The institutionalization of the scientific method transformed knowledge production from the flashes of brilliance of individual geniuses into systematic, collective exploration.

It is particularly noteworthy that there are immense differences in the time scales of the three historical eras. The Foraging and Hunting Age lasted about three million years, the Agrarian Civilization continued for ten thousand years, while the Industrial Age has only spanned just over two hundred years. This accelerated development means that the depth and breadth of the changes achieved in the last two hundred years far exceed the cumulative changes of the preceding millions of years.

Historical Materialism

Historical education in China is deeply influenced by Historical Materialism, which constructs a chain of historical evolution based on class contradictions: Primitive Society, Slave Society, Feudal Society, Capitalist Society, Socialist Society, and finally, Communist Society.

There are three major problems with this periodization method:

1. **Failure to fully recognize the revolutionary significance of the Industrial Revolution.** Placing slavery, feudalism, and capitalism on the same level is akin to simply classifying a canoe, a sailboat, and a steamship all as "vessels," ignoring the fundamental difference in the power system. The distinction between Agrarian Civilization and Industrial Civilization is far more essential than the difference between slavery and feudalism. The former is a finite growth system built around land and bioenergy; the latter is an exponential development model based on fossil fuels and technological innovation. Economic historian Gregory Clark's research shows that the global per capita GDP growth curve experienced a near-vertical turn around the Industrial Revolution, a discontinuity that is completely invisible in the traditional periodization framework.
2. **The mechanical application of the theory of class struggle.** In the agrarian age, where land was the core means of production, the contradiction between landlords and peasants was indeed the primary social tension. However, the logic of Industrial Civilization's development has fundamentally changed—as management guru Peter Drucker pointed out, the core contradiction in the modern economy is no longer labor-capital antagonism, but the contest between innovation and conservatism. Mechanically transplanting the struggle paradigm of the agrarian

age to industrial society is as anachronistic as trying to operate a tractor with the experience of using an ox-plow.

3. The prediction of the inevitability of the 'proletarian revolution' exposes the limitations of historical determinism. The reality of the 20th century shows that the improvement in the working class's situation primarily came from technological innovation and institutional improvement, rather than violent revolution. The practical path taken by the German Social Democratic Party and the Nordic welfare state model both prove the feasibility of gradual reform. Private ownership of property is likely the ultimate form of human existence before entering a spiritual state. The assumption that "socialism based on the public ownership of the means of production" is a necessary stage after capitalism is neither necessary nor essential.

The transition from agrarian society to industrial society was not instantaneous; the Industrial Revolution was a landmark event, but the overall transformation spanned about 300 years. Below, we will detail these three centuries of transition, which Liu Zhongjing refers to as The Three Worlds.

The Darwinian World

If the Eurasian landmass is likened to a global village, the world before 1648 followed the Darwinian law of the jungle: survival of the fittest was the norm, where the strong could plunder and conquer the weak without justification, and war, aggression, and massacre were ubiquitous. The continuous cycle of shifting power between the strong and the weak led to countless tragedies and disasters throughout human history.

The contradiction between land and population constituted the fundamental tension of the agrarian age. The industry structure centered on farming and the exponential growth of the population created an irreconcilable land conflict. One group possessing more resources necessarily meant the sacrifice of another group.

- For peoples west of Central Asia, to maintain survival, tribes or states often resorted to external expansion to acquire more land resources, which was typically achieved through war, conquest, and slaughter.
- For the vast and enclosed Central Plains agrarian zone, the people had to endure a cycle of order and chaos every few centuries. Population saturation led to land annexation and industrial involution (*nèi juǎn*), while problems like official corruption, factional struggles, and social contradictions intensified, increasing the cost of rule. The cycle ultimately concluded with large-scale peasant uprisings that reset the social order.

The Darwinian World's primary modes of production were farming and nomadic herding, mixed with a small amount of commerce and industry. Bioenergy (human and animal power) was the main energy source, and the total world energy consumption remained static at around 30 kWh/year for thousands of years. According to economic historian Angus Maddison's estimates, the global per capita GDP growth rate between the year 1 CE and 1820 CE was only 0.02%, indicating near-stagnation.

The upper limit of biological output essentially constrained the upper limit of production efficiency, with mechanical power like windmills and water wheels having limited application. For instance, the efficiency of ox-plowing fundamentally limited the maximum agricultural output per unit of land. Without breaking this ceiling, civilization could not continue to upgrade. Similarly, the speed of a horse limited the speed of information transmission, which in turn limited the territorial scope of the empire. Once an empire became too large, it inevitably disintegrated due to ineffective administration caused by poor information flow. The largest empire in Eurasian history, the Mongol Empire, only lasted for two generations. Once the kinship ties collapsed, the empire quickly fell apart.

The world order of the Darwinian Age was web-like, with civilizations interacting through war and trade. Each civilization had its unique characteristics, its own areas of strength, and its moments of glory. It is difficult to identify a single center or a single dominant civilization in the Darwinian Age of Eurasia. The numerous civilizations that existed during this period—including Greek, Christian, Arab, Persian, Indian, and Chinese civilizations—all had their unique brilliance and history, as well as their inevitable vulgarity and barbarism. Human society as a whole during this period was in a primitive, unenlightened state. Even if a few geniuses occasionally glimpsed a shred of truth, these insights were buried in the general ignorance of the populace.

If modern civilization is considered humanity's adulthood, then the Darwinian World was the elementary school age of human civilization. This era sometimes burst with wisdom and glory, yet was often filled with ignorance and backwardness. Debating the superiority or inferiority of civilizations during this period is meaningless, akin to a group of adults showing off their primary school report cards. Such arguments lead nowhere, only yielding points like: *My language score was better; your math score was better; I was first in my class in third grade, and you did well in fourth grade.* Such "differences between elementary school students" are insignificant compared to the gap between a child and an adult.

In this multipolar world of ancient Eurasia, China played an important role. Chinese civilization was characterized by its unique large population and wealth accumulation. This allowed China to consistently maintain a high total GDP output during its imperial periods. However, it is equally important to recognize that China's per capita GDP was often below the world average for much of this time. This is not surprising: surplus food production was always diluted by population increase, rather than used to improve individual consumption power. Chinese civilization was sometimes excellent, but not exceptionally outstanding; it appeared deficient in some aspects, but not exceptionally deficient. While we admire the profundity of classical Chinese medicine, we must also remember the equally voluminous medical texts of ancient Arabic medicine. When we mock the thousand-year-long system of eunuchs, we must not overlook that contemporary Europeans created castrati to fill church choirs. Excessive conceit and self-contempt are both ill-advised; we are not special.

The Hobbesian World

The transition from agrarian civilization to modern society was a profound and challenging systemic transformation. This 300-year transition period is referred to by Liu Zhongjing as the Hobbesian Age.

The Treaty of Westphalia in 1648 is considered the starting point of modern international law, establishing the fundamental principles between sovereign states and laying the foundation for international relations. The period from 1648 to 1945 was one where international law gradually formed, and it was also a system centred on European nation-states. On the one hand, powerful nations could still achieve their interests through force, but the norms and constraints of the international community also became increasingly strict, meaning powerful nations could no longer act as arbitrarily as before. On the other hand, weak nations also had opportunities to protect their interests through various means, such as uniting with other weak nations or seeking external assistance.

The Hobbesian period was the transitional stage from the ancient to the contemporary world. The energy structure gradually shifted from bioenergy to chemical energy (coal and oil), and the total world energy consumption increased from 30 kWh/year to 100 kWh/year. The source of GDP in developed countries gradually shifted from farming and herding to industry and services. Unlike the operational logic of agriculture, industry and services are not a zero-sum game but involve a "positive feedback mechanism," where output can be continuously magnified through the cycle of "production driving consumption, and consumption expanding production." This change is evident in the timeline graph of global energy consumption. Global total energy consumption is essentially divided into two parts marked by the Industrial Revolution: the first part remained largely static for millennia, only fluctuating cyclically, while the curve rose sharply after the Industrial Revolution and continues to increase without signs of slowing down.

International relations during this period are called the "Western International System," or the "Hobbesian System," because its theoretical foundation stems from the state theory in the work *Leviathan* by English philosopher Thomas Hobbes. The Hobbesian System retained some of the behaviours of the barbaric age, such as colonialism and the slave trade, but simultaneously, the mindset of modern civilization gradually began to emerge, eventually growing into a towering tree after World War II. Politically, concepts like liberty, democracy, and human rights transitioned from initial appearance to gradual acceptance. International relations evolved from pure Darwinism to a dominant "Hobbesian" model driven primarily by power, assisted by treaties and international law, ultimately evolving into the Wilsonian System after World War II.

If we continue the global village analogy, ancient civilizations were like isolated village families holding stones and clubs. The village itself was in an unenlightened, disorderly state. One day, a few villagers residing on the western edge of Eurasia had a sudden moment of insight and learned to kill with a knife. What happened next? The European powers in the early Hobbesian Age were precisely those "villagers who learned to use the knife." They used overwhelming military force to wage wars, traffic slaves, and plunder wealth worldwide.

Today, while we must condemn the disasters and harm inflicted on Third World countries by colonialism during this transition period, we must also acknowledge that the root of this evil lies in the fact that human society itself emerged from a barbaric, disorderly set of rules. When the old rules of the game became incompatible with the new technology, these "newly wealthy nations" naturally took full advantage and became the winners of the colonial system. At the same time, we must recognize that the new rules of the game and the world system were gradually conceived and matured during this period, finally growing into a towering tree after World War II.

The first country to attempt to establish new rules was Great Britain. After the Napoleonic Wars, Britain tried to establish a three-tiered world system. The Congress of Vienna in 1819 was a key manifestation of this idea. In the British-designed world system, European powers were the first-tier nations, enjoying special status and rights. Members of the Great Power Club followed specific rules of warfare: formally declaring war before fighting; refraining from massacring civilians or mistreating prisoners during the war. Many principles now accepted as standard were proposed at that conference. The broader "uncivilized nations" were viewed as subordinates of the Great Powers, forced to comply with their wishes and supply them with resources and cheap labor. As for the existing old empires on the Eurasian continent, Britain adopted a strategy of supporting proxy agents, forcing them to open their doors under the threat of gunboats and artillery to serve as consumer markets for European capital, becoming targets of British economic exploitation. In this world system, European powers implemented colonial policies, plundered vast resources and wealth, and simultaneously imposed cultural and identity deprivation on the colonized regions.

Chinese civilization was forced into the world system precisely in the late Hobbesian Age. On one hand, Chinese people, just beginning to open their eyes to the world, struggled to distinguish the advanced from the backward parts of the Western world. On the other hand, modern Chinese intellectuals often conflated the diplomatic strategies of Western powers like Britain and the US, Germany and France, and Russia and Japan. Western civilization sometimes exhibited economic and cultural advancement, yet at other times displayed the barbarism of aggression and plunder. For Britain, the dominant world power at the time, China was positioned at the junction between "civilized nations" and "uncivilized nations," and its attitude toward China often fluctuated based on the official Chinese response. This lack of coordination and distrust created China's complex mentality toward Western civilization.

The Wilsonian World

In the early 20th century, with the rise and growing strength of the United States, the US began attempting to build a more equal and open international system. The Wilsonian System is named after the series of initiatives and policies promoted by US President Woodrow Wilson after World War I to establish an international order based on multilateralism, international cooperation, and peaceful coexistence. Although Wilson's ideals were too advanced for their time and were not immediately realized, they were ultimately implemented after World War II and accepted by mainstream Western society.

The Wilsonian System is founded on international law, aiming to resolve international disputes and promote global economic and cultural development through multilateralism, consultation, and cooperation. Unlike Britain's multi-tiered world system, the international system promoted by the US is based on the principles of national sovereignty and equality, where all nations have the right to autonomous decision-making and participation in global governance.

In the Wilsonian Age, developed countries had completed industrialization, marketization, and democratization. Their GDP composition is roughly 60% services, 30% industry, and 10% agriculture. The energy structure of the Wilsonian Age is dominated by chemical and nuclear energy, with global energy consumption exceeding 100 MG/year and continuing to rise. The Wilsonian World uses the free market as its fundamental dynamic mechanism, with values centred on protecting fundamental human rights and private property rights. It follows economic principles where Keynesianism and Neoliberalism mutually balance. Politically, Wilsonian nations identify with universal values and form a core force within their bloc against the nationalism of the 'Hobbesian Age.' Democratic elections are the primary form of government in Wilsonian nations, though the specific mechanisms of these elections vary.

The greatest contradiction of the Wilsonian Age lies in the uneven development between nations and regions. The world contains nations that have completed modernization, such as the EU and the US; nations undergoing transition, such as China and Russia; and nations that remain un-modernized, still rooted in the agrarian age, such as those in Africa. This imbalance creates the complexity of post-Cold War international relations.

Within the Wilsonian bloc, integration based on universal values has been completed, and wars between democratic nations have largely ceased, replaced by competition within the rules of the game. Outside the Wilsonian bloc, however, regional wars driven by nationalism and resource competition continue to occur. These wars often take place between developing countries or on the borders between developing and developed nations. In these situations, the military bloc led by the US often adopts a pragmatic approach: sometimes ignoring or tacitly allowing their development (e.g., the Iran-Iraq War) and sometimes acting as the judge of the world order. Their external use of force generally manifests as a police action (e.g., the Gulf War).

The Wilsonian System is not without controversy, particularly regarding its construction and maintenance of world order. Some critics argue that it primarily serves the interests of the US and its allies, and that it overemphasizes multilateralism and cooperation while neglecting the relationship between national sovereignty and power. Furthermore, some express concern and scepticism about a world order maintained through forceful intervention. They argue that this approach could lead to power politics and hegemonism, undermining national sovereignty and the right to self-determination.

As a late-developing nation, China's attitude toward the existing world system is ambiguous. China recognizes and supports some of the principles advocated by the Wilsonian World System, such as multilateralism, international cooperation, and peaceful coexistence. However, China also holds many criticisms and reservations

about the system. China argues that Western countries, particularly the US, act with their own interests at the centre, abusing international power and interfering in the internal affairs of other nations, which has caused major international conflicts and instability. Post-reform China contains both voices advocating for 'integration into the existing world order' and those calling for 'subversion of the existing world order'. This confusion can be viewed as a continuation of China's ambivalent attitude toward Western civilization rooted in the Hobbesian Age.

Chapter Five: The Industrial Age

The Vanishing Cycles

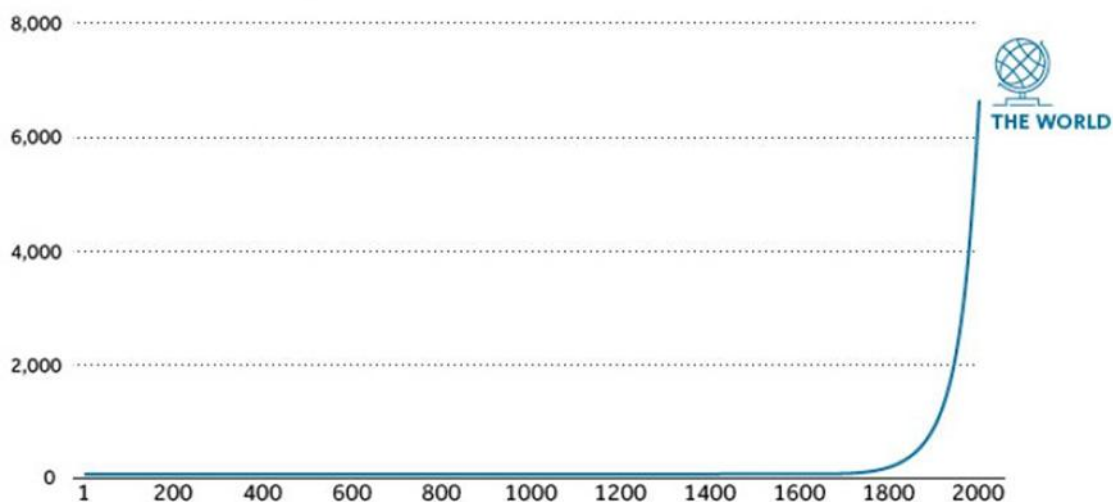
Looking across the global economic history of the past two thousand years, the growth trajectory of total world GDP presents an extreme "hockey stick curve": during the long span of nearly 1,800 years, it extended horizontally, almost hugging the horizon, until the most recent two centuries, when it suddenly carved a nearly vertical arc and began an explosive growth.

In the long years before 1800, human society was perpetually imprisoned in the "Malthusian Trap." Every slight improvement in productivity was quickly offset by the subsequent growth in population, leading to long-term stagnation in per capita output. For a farmer in 1000 AD, there was no essential difference in living standards or labour tools compared to a farmer seven hundred years later. At that time, China and India occupied the core of the global economic landscape due to their dense populations.

It is worth noting that this seemingly flat "horizon" from a macro perspective was actually teeming with undercurrents. It concealed the countless rises and falls of dynasties and the ebbs and flows of civilizations at the base—those clashing iron hooves and cycles of order and chaos deep in history appear so faint in the face of the exponential growth of modern industrial civilization that they seem as if they had never happened.

The true historical inflection point occurred during the Industrial Revolution around 1800. With the emergence of the steam engine, railways, and the modern factory system, the dormant curve began to rise sharply. Western Europe and North America were the first to break through and enter a modern growth model, and the global distribution of wealth underwent a dramatic change. From then on, Western countries began to rapidly surpass the East, and human society entered an unprecedented era of growth miracles, a process also known in academia as the "Great Acceleration."

World GDP Per Capita (1990\$)



SOURCE: "Statistics on World Population, GDP, and Per Capita GDP, 1-2008 AD", Angus Maddison; IMF

To explore why this curve turned so suddenly around 1800, we must return to the scene where the transformation was brewing. From this chapter onwards, we will focus our lens on Europe during the era of Hobbes, using three chapters to systematically outline the political, intellectual, and institutional background behind this global explosion of growth.

The Scientific Revolution

The Scientific Revolution, the Bourgeois Revolutions, and the Industrial Revolution in the history of Britain formed a mutually catalytic "Golden Triangle" relationship: the Scientific Revolution broke the intellectual shackles of the Middle Ages, laying the philosophical foundation for institutional change; the Bourgeois Revolutions restructured the power framework, providing the institutional guarantee for technological innovation; and the Industrial Revolution leveraged the achievements of the first two revolutions to realize a leap in productivity.

After the periods of geographical discovery, the Renaissance, and the Reformation, Europe saw the emergence of an even greater, more epic transformation: the modern Scientific Revolution. It was from this moment that Europe gradually began to distance itself from other traditional civilizations. A simple, incremental, and precise rationality replaced the previous vague, supernatural imagination.

The Expansion of Cognitive Horizon

The century and a half before 1600 is known as the Renaissance. The Europeans of the Renaissance were indeed in an era of intellectual expansion. On one hand, with the fall of the Eastern Roman Empire, knowledge from the Arab world, India, and China rapidly flowed into Europe. On the other hand, the discovery of the Americas brought new wealth, species, and cultures. But were these new discoveries sufficient to spark a revolution in thought? I believe they were far from enough, because these discoveries were, overall, still classical and could be explained by traditional theories. The so-called inventions and discoveries of the Renaissance did not depart from the classical paradigm of thought; on the contrary, they pushed classical thinking, similar to that of ancient Greece, the flourishing Tang Dynasty, and Arab civilization, to a new peak.

In the 17th century, disruptive inventions appeared: imaging systems.

- When Galileo pointed the telescope toward the heavens, he not only saw the moons of Jupiter but also tore apart the millennia-old cognitive system of the cosmos.
- When Leeuwenhoek observed water droplets with the microscope, he discovered not just microorganisms but also opened up a universe parallel to the macroscopic world.

The cognitive revolution brought about by these imaging tools was fundamentally different from the Renaissance's mere organization and revival of classical knowledge—they created entirely new cognitive dimensions.

The traditional knowledge system revealed its fundamental limitations under the impact of optical instruments. The cosmos constructed by the ancient Greek philosophers through speculation appeared so narrow before the vast starry sea revealed by the telescope; the life theories meticulously woven by medieval Scholastics instantly lost their explanatory power when confronted with the microbial world shown by the microscope. This cognitive rupture gave rise to a new way of thinking: Bacon's inductive method shifted cognitive authority from ancient texts to experimental data, and Descartes' analytical geometry transformed mathematical language into a universal code for exploring nature.

The historical significance of this cognitive revolution is that it fundamentally changed the path by which humanity seeks truth. When scientists realized that classical texts could not explain the ciliates under the microscope or the nebulae in the telescope, the paradigm of knowledge production underwent a fundamental shift: from annotation and interpretation of ancient authorities to discovering new laws through experimental observation. This shift occurred not only in the natural sciences but also profoundly influenced the entire Western intellectual tradition, including the Enlightenment's exaltation of reason, the Industrial Revolution's faith in technology, and even the empirical spirit of modern society. In this sense, the optical inventions of the 17th century were not merely advances in tools, but a genetic mutation in the human way of thinking.

Separation of Religious Authority and Secular Politics

The Religious Reformation of the 16th century provided unique spiritual impetus and cultural soil for the Scientific Revolution. The Reformation did not deny the existence of God but broadened the understanding of God. Christians did not need a secular authority to interpret the Bible; instead, they could understand God according to their own conscience. Luther's concept of "justification by faith" negated the mediating role of the Church, promoting the legitimacy of individual rational judgment. Calvinism's predestination urged believers to prove God's grace by studying the natural order. The Puritan view of the "calling" (*Tūan zhí guān*) sanctified secular professions, holding that revealing natural laws through scientific research was itself an act of glorifying God. Robert Boyle, for instance, likened laboratory work to "reading the book of nature, written by God's own hand."

With the rise of Deism, a new worldview gradually formed God was seen as a rational legislator who ruled the world through natural laws rather than miracles. Newton himself firmly believed that his Law of Universal Gravitation did not negate God but, rather, proved the existence of divine design.

This "semi-de-deification" by the Reformation played a rare stabilizing role in modern history. English Puritans translated this religious philosophy into concrete social practice, forming a unique tradition of gradual reform. They transformed the biblical concept of the "Covenant Law" into constitutional thought and used the sanctity of "God's witness" to endorse the rule of law, enabling the Glorious Revolution of 1688 to achieve regime change through an uncommonly peaceful manner. Compared to the bloody revolutions on the European continent during the same period, Britain's stable transition was especially valuable historians estimate that political violence incidents in Britain decreased by over 70% after the Glorious Revolution compared to the

French Revolution era. This gentle model of revolution largely benefited from the conservative tradition fostered by the Reformation.

More subtly, the Protestant ethic provided moral legitimacy for the development of capitalism. When John Wesley declared that "religion must produce industry and frugality, and these two must produce wealth," he was essentially imbuing capital accumulation with sacred meaning. This idea of sanctifying secular professions effectively dissolved class antagonism during the early process of industrialization—the proportion of British workers participating in radical movements in the 1830s was only 8%, far lower than the scale of worker uprisings in France during the same period. In contrast, the "Dechristianization Movement" during the French Revolution led to the killing of 4,000 clergy, an act almost absent in British history.

The Formation of the Scientific Community

The formation of the scientific community provided the organizational guarantee for the revolution's sustained development. In the mid-17th century, the "Invisible College"—a network of scholars—emerged in England, with figures like Boyle and Wilkins meeting regularly in London and Oxford to share the latest discoveries through correspondence and experimental demonstrations. This informal academic exchange evolved into the institutionalized Royal Society in 1660. Its Latin motto, "Nullius in verba" (Take nobody's word for it), aptly captured the spirit of this new academic community. The Society's aim was "to increase natural knowledge by experiment," and its membership broke down traditional social class barriers—nobles, scholars, and skilled craftsmen exchanged ideas equally.

The process of science professionalization achieved a breakthrough during this period. Newton's stable professorship as the Lucasian Professor at Cambridge, and Halley's royal funding to focus on comet trajectories, demonstrate that scientific research began to break away from reliance on private patronage, forming an independent career path. Crucially, modern research standards first emerged: the *Philosophical Transactions*, first published in 1665, innovatively required authors to detail their experimental procedures. This emphasis on reproducibility established the foundation for the later peer-review mechanism. When Boyle insisted that "fact should precede hypothesis," he was essentially establishing a code of research ethics that continues to this day.

This new model of knowledge production had three revolutionary characteristics:

1. It established a knowledge accreditation system centered on experimental verification, replacing the Scholastic reliance on ancient authority.
2. It created a cross-class platform for academic exchange, enabling the deep integration of theoretical thought and technical craftsmanship.
3. It developed institutionalized mechanisms for publication and review of results, allowing scientific discoveries to undergo public scrutiny.

It was these institutional innovations that ensured the Scientific Revolution was not a fleeting intellectual spark, but a powerful engine that continuously propelled human civilization forward.

The Bourgeois Revolutions

The English Bourgeois Revolutions of the 17th and 18th centuries are often regarded as the foundational events of modern political systems. Yet, their motivation was not solely abstract notions of liberty or monolithic class demands, but a confluence of three forces: the Gentry (New Nobility), the Commercial Capitalist Group, and the Old Whig Party.

- Political Level: The Constitutional Monarchy stabilized the joint rule of the New Nobility and the bourgeoisie, providing the institutional guarantee for the Industrial Revolution.
- Economic Level: Primitive capital accumulated from global plunder was transformed into industrial investment through the Financial Revolution, giving birth to the capitalist world system.
- Ideological Level: The Whig Party's liberal discourse became the theoretical source of modern Western liberal economics, though its exclusivity also sowed the seeds of colonialism and class conflict.

The Rise of the New Nobility and Their Political Demands

The core drivers of the English Revolution were not the traditional feudal nobles, but a group known as the "New Nobility" (Gentry) who rose during the economic changes of the 16th-17th centuries. They were mostly country gentry and commercialized landowners who accumulated immense wealth through the Enclosure Movement, wool trade, and overseas investment. Tocqueville, in *The Old Regime and the Revolution*, noted that a key difference between England and France was that the English aristocracy never fully detached from commercial activity but actively participated in shaping the market economy.

While these New Nobles were economically bourgeois, they were politically constrained by the feudal privilege system of the Stuart monarchy. Charles I's absolutist rule, especially taxation without parliamentary consent (like the "Ship Money"), directly infringed upon their property rights. The convening of the Long Parliament in 1640 marked the complete rupture between the New Nobility and the Crown. They demanded not only the limitation of monarchical power but also the complete abolition of the feudal land system through legislation. The passage of the Tenures Abolition Act in 1646 formally severed the link between land ownership and feudal obligations, making property purely private.

The economic significance of this change was equal to its political impact—as Marx emphasized in *Das Kapital*, the essence of the English Revolution was the "victory of bourgeois property relations over feudal property relations." However, the revolution's leader, Cromwell, despite overthrowing absolute monarchy, failed to establish a stable representative government. His Protectorate was essentially a military dictatorship, reflecting the political immaturity of the New Nobility—they craved power but had not yet found an appropriate institutional framework.

State-Backed Global Plundering System

Another powerful impetus for the Bourgeois Revolutions came from Britain's reliance on global plunder. As early as the Elizabethan era, piratical colonial expansion (like Drake's attacks on Spanish merchant ships) had accumulated significant wealth for the state. However, it was the post-revolutionary parliamentary government that truly institutionalized plunder. During Cromwell's time, Britain not only suppressed the Irish Rebellion (1649–1653) but also attacked Dutch commercial supremacy through the Navigation Acts (1651) and seized Jamaica (1655) as a strategic Caribbean stronghold. These actions demonstrated that the revolutionary government was not solely focused on domestic political reform but was actively building a state-backed global plundering network.

This trend became even more pronounced after the Glorious Revolution (1688). The Whig-dominated Parliament not only established the constitutional monarchy but also tied national credit to colonial expansion through the Financial Revolution (e.g., the founding of the Bank of England in 1694). The East India Company evolved from a chartered commercial enterprise into a "state within a state," implementing military conquest and economic exploitation in the Indian subcontinent. Historian Perry Anderson, in *Lineages of the Absolutist State*, argued that 18th-century Britain had formed a "fiscal-military state" model, maintaining imperial expansion through a cycle of war financing, colonial plunder, and national debt. The beneficiaries of this system were precisely the New Nobility and commercial capitalists who held dominant positions in Parliament.

The Dual Nature of Liberalism

However, explaining the revolution solely through economic interests fails to fully capture the enduring impact of its ideology. The Old Whigs (such as Algernon Sidney and John Locke) provided the theoretical defence for the revolution, and their liberal doctrine became the cornerstone of modern constitutionalism. Locke's *Two Treatises of Government* (1689) asserted that the legitimacy of government derived from the consent of the governed and emphasized the sanctity of property rights. This theory, though seemingly universal, concealed a profound contradiction—when Locke spoke of "property rights," he referred to the rights of propertied Englishmen, not those of Irish peasants or African slaves.

Whig liberalism manifested in practice as an "oligarchic democracy." Despite the establishment of parliamentary supremacy after 1688, suffrage remained limited to a minority of wealthy men (the Property Qualification Act of 1710 further restricted the electorate). As historian J.G.A. Pocock revealed in *The Machiavellian Moment*, the "classical republicanism" championed by the Whigs was essentially elite politics, where their ideals of liberty coexisted with imperial atrocities.

The Whig Party monopolized power in the 18th century, promoting the "fiscal-military state," but their "liberty" was restricted to white male property owners (such as the property qualification for voting in 1710). The widespread popularization of the electoral system occurred in the 19th and early 20th centuries, which will be discussed in Chapter Seven. The stark contrast between internal constitutional progress, judicial independence, and freedom of speech and external imperial atrocities (e.g., the East India Company's plunder in Bengal, where seizing taxation rights in 1765 led to a massive famine) is striking.

The true legacy of the English Bourgeois Revolutions lies in shaping a unique form of capitalist modernity—establishing a constitutional framework internally while pursuing colonial plunder externally; simultaneously championing individual liberty while maintaining class privilege. 19th-century liberals like John Stuart Mill were still defending the binary of "civilized" vs. "barbaric," an ideology whose roots can be traced back to the contradictions and compromises of the 17th- and 18th-century English Revolutions.

The Industrial Revolution

The Industrial Revolution, which erupted and sustained itself in Britain in the late 18th century, was not merely reliant on accidental technological inventions but depended on a series of mutually supportive structural conditions. Among these, the application of mathematical methods provided the scientific tools for innovation, the energy revolution broke the bottleneck of production power, and the property rights system and patent protection provided the institutional incentives for invention.

Application of Mathematical Methods: From Empirical Technique to Precision Engineering

Technological improvements before the Industrial Revolution mostly relied on the empirical accumulation of artisans. However, 18th-century scientific progress, especially the application of mathematics in engineering, moved mechanical design from "trial-and-error" to precise calculation.

Newton's establishment of classical mechanics in *Philosophiæ Naturalis Principia Mathematica* first described the laws of motion using the precise mathematical language of calculus. However, as readers familiar with theoretical physics know, directly applying Newton's differential equations to solve multi-degree-of-freedom problems encountered in technical engineering is difficult. In the 100 years following Newton, through the efforts of mathematicians like Euler, Lagrange, and Hamilton, a set of more computationally convenient analytical mechanics methods gradually developed. Analytical mechanics replaced Cartesian coordinates with generalized coordinates, constructing differential equations based on the Principle of Least Action. These new mathematical methods made the analysis of complex mechanical systems possible.

It is noteworthy that the industrial application of mathematical theory experienced a lag of about 50 years. Newton's theories were not widely adopted by engineers until the mid-18th century, and Lagrange's work was only fully integrated into engineering practice by the early 19th century. This delay highlights the complexity of knowledge transfer: engineering mathematics courses offered at universities like Cambridge and Glasgow, applied mathematics articles published in mechanics magazines, and emerging engineer training systems collectively formed the crucial channels for the translation of theory into practice.

The advancement of mathematical methods had a profound, multi-level impact on the Industrial Revolution.

- First, it shifted mechanical design from empirical groping to scientific calculation. The thermal efficiency of Watt's steam engine rose from the Newcomen engine's 0.5% to 8%, and the rotational speed of textile machinery increased by 300% between 1780 and 1820. These breakthroughs directly resulted from more precise mechanical calculations.
- Second, the revolution in manufacturing precision guided by mathematics made standardized production possible. Machine tool processing errors decreased from 1 mm in 1770 to 0.1 mm in 1830.
- Finally, in energy utilization, mathematical analysis increased water wheel efficiency from 30% in 1750 to 70% in 1850, and improvements in coal mine ventilation systems allowed mining depth to increase threefold.

Energy Revolution: From Bioenergy to Fossil Fuels

One of the core breakthroughs of the Industrial Revolution was the fundamental shift in the energy structure. In the pre-industrial age, human society mainly relied on bioenergy (human power, animal power, wood, water, and wind), which were limited by geography and seasons and could not support large-scale industrial production. The large-scale mining of coal combined with the steam engine completely changed this situation.

The widespread use of coal: Britain's geological conditions provided abundant coal reserves. Advances in deep mining technology in the 18th century (such as steam drainage pumps) caused coal production to soar, increasing from 3 million tons in 1700 to 10 million tons in 1800. Coal not only provided coke for iron smelting but also became the core fuel for the steam engine.

Coal has a much higher energy density than wood; 1 ton of coal's calorific value is equivalent to 2–3 tons of wood, enabling the rapid development of high-energy-consuming industries (like iron smelting and chemicals). Energy density is typically measured in megajoules of energy released per kilogram of fuel upon complete combustion.

Fuel Type	Energy Density (MJ/kg)
Wood	~15
Coal	~30
Oil	~45
Liquid Hydrogen	~140

Britain's coal production was 3 million tons in 1700, rose to 10 million tons in 1800, and rapidly increased to 50 million tons in 1850. This leap in energy density, coupled with Britain's abundant coal reserves (accounting for 80% of Europe's total at the time), formed the most fundamental material basis of the Industrial Revolution. As economic historian E.A. Wrigley stated, "The switch from an organic economy to a mineral economy was as important as the leap from the Stone Age to the Bronze Age."

Property Rights and Patent Protection: Institutional Guarantee for Innovation

Technological innovation requires incentive, and the property rights system and patent protection established in Britain during the 17th and 18th centuries provided inventors with stable expected returns, thereby accelerating technology diffusion.

The Statute of Monopolies (1624) was one of the world's earliest modern patent systems, granting inventors 14 years of exclusive production rights. In contrast, France did not establish a modern patent system until 1791. After the Glorious Revolution (1688), Britain established parliamentary supremacy and the rule of law, meaning the government could not arbitrarily seize private property. This made investors more willing to undertake the risk of long-term industrial projects. The Extension Act of 1775 further extended patent protection to 25 years. For example, Watt's steam engine patent had an actual protection period of 25 years, allowing him to collaborate with investor Matthew Boulton for commercial production without fear of imitation.

The development of joint-stock companies and stock exchanges enabled technological innovation to receive investment from social capital, rather than solely relying on individual wealth. The Statute of Frauds (1700) improved the system for mortgaging movable property. Textile patents could typically secure loans covering 40–60% of R&D costs, while steam engine-related patents could reach 80%. Economist Douglass North noted that the success of the British Industrial Revolution lay fundamentally in "the institutions providing a continuous incentive for innovation."

Chapter Six: The Positive-Sum Game

The Allegory of Gold Mines, Cities, and Capital

Throughout the long Agrarian Age, land, as the most critical resource, defined the ceiling of societal wealth. While vast fields nourished life, the carrying capacity of the land was ultimately limited—once the last inch of fertile soil was cultivated, no amount of added sweat could make the golden grain heads yield a single extra kernel. Consequently, the distribution of wealth devolved into a brutal zero-sum game: the extensive estates of the landlord class inevitably meant the erosion of the tenant farmer's foothold. For two thousand years, Chinese history replayed the same cyclical drama: officials and magnates extracted the peasants' blood and toil through rent and corvée labour, and this irreconcilable contradiction eventually transformed into the widespread fires of dynasty change.

The whistle of the Industrial Revolution completely rewrote the logic of wealth growth. As the roar of machinery replaced the panting of the ox, the rules of the capital market game had transformed—the flywheel of "production expanding demand, demand driving consumption, and consumption promoting production" began to spin. In the economic landscape of a modern nation, agriculture only occupies one-tenth of the GDP, industry holds up three-tenths, and the service sector robustly supports the remaining half.

Although industrial civilization broke the shackles of the land, it is still constrained by certain scarce resources: most industrial raw materials, such as ores, timber, and chemical products, can be acquired almost infinitely, but some resources remain finite, such as oil and rare earths. Therefore, this 'positive cycle' cannot proceed indefinitely and is ultimately subject to the hard constraints of certain raw materials. What truly achieves exponential growth is the virtual ecosystem built by commerce and services: here, there is no worry about the depletion of mineral veins, only the continuous creation of new value by the balancing act of supply and demand. As the urban skyline is constantly being refreshed by skyscrapers, this self-reinforcing economic positive cycle is propelling human civilization to an unprecedented height.

On the West Coast of the Americas in the eighteenth century, a myth of wealth began to circulate—shining gold was buried deep in the mountains. Suddenly, adventurers, speculators, and prospectors dreaming of sudden riches poured in like a tide. The initial capital accumulation was stained with blood: greedy merchants amassed wealth through the slave trade and smuggling; enslaved Africans dug the veins under the lash; and desperate Chinese immigrants and Native Americans sold their sweat for meagre wages.

However, this is not just an old story about exploitation. As the gold rush spread, another group quietly appeared—they were not digging for gold, but they, too, smelled wealth.

- Astute merchants began selling food and tools to the miners.
- Farmers, finding it profitable, moved in to set up markets.

- Textile manufacturers, spotting a business opportunity, produced durable work pants.
- Theater owners soothed the tired workers with drama and music.
- Bankers and insurers followed closely, injecting financial lifeblood into the nascent city...

The gold mine would eventually run dry, but the city's life did not end there. Fifty years later, this was no longer a desolate mining area but a prosperous town of tens of thousands, where manufacturing, entertainment, and finance took root. Two hundred years later, it grew into a modern metropolis of millions, with an annual GDP of billions.

A thought-provoking question then emerges: Where did the wealth come from? The value of the gold mine was trivial compared to the scale of this city. What allowed hundreds of thousands of people to live comfortably and continuously create prosperity?

The answer lies in the magic of the capital market—it ensured that wealth was no longer limited to finite natural resources but continuously appreciated through a cycle of investment, consumption, and reproduction. In this process, the beneficiaries were not just the original mine owners but also the miners, farmers, textile workers, chefs, actors, bank employees... Everyone's labor was transformed into new value through market exchange.

The Evolution of Capital, Population, and Consumption Power

This is fundamentally different from agrarian civilization. In an agricultural society, land output is limited, and wealth distribution is a zero-sum game—if the landlord gains one part, the tenant farmer loses one part. But the capital market broke this constraint: the total amount of wealth is not fixed; it can grow indefinitely. The rich can get richer while the poor can also see their circumstances improve. The free market might widen the gap between the rich and the poor, but this does not mean the bottom layer gets absolutely poorer—on the contrary, in the wave of overall economic growth, even those who benefit the least may see an improvement in their living standards.

China's Reform and Opening-up is a vivid example of this rule. Despite the widening wealth gap, the living standards of even the lowest strata of society are far superior to those before the reform. The power of capital lies not in plunder but in creation—it shifts the source of wealth from finite gold mines to infinite human collaboration and innovation.

In the early stages of capital accumulation, population size was tightly bound to the carrying capacity of the land—limited arable land determined how many people society could support, and per capita consumption capacity depended on the prosperity of industry and commerce. However, with the promotion of hybrid rice and the rise of the fertilizer industry, agricultural productivity saw a revolutionary leap, and the constraints on grain output were completely broken. From then on, population growth was no longer limited by the barrenness or fertility of the land but shifted to an invisible boundary shaped by social culture, education level, and economic structure.

The rise of the capital market created a total wealth volume far exceeding that of agrarian civilization and led to a qualitative leap in the consumption power of ordinary families. This transition is clearly reflected in the world's per capita GDP growth curve: for thousands of years before the Industrial Revolution, global per capita GDP hovered around \$500, periodically rising and falling like the tide; even the prosperous Song Dynasty could not break this constraint. But from the moment the steam engine roared, this curve sharply ascended, continuing its near-linear climb without sign of decline.

Another indicator measuring individual economic freedom is the Engel coefficient—the proportion of food expenditure in a household's total income. In traditional agricultural society, a family had to spend over 80% of its income on food, with the meager remainder barely enough for survival; in modern developed countries, this coefficient has fallen to around 20%, meaning people can invest the vast majority of their wealth in education, healthcare, entertainment, and investment, continuously broadening the boundaries of life's possibilities.

The power of capital lies not only in creating more wealth but also in reconstructing the logic of human existence—a shift from "struggling for subsistence" to "pursuing abundance," and from "being constrained by land" to "being defined by opportunity." This transformation is the deepest undercurrent of modern civilization.

Market-Based Economic Logic

From Exploitation Narrative to Cooperative Competition

Marx's classic theory defined capitalism as the exploitation of workers by capitalists, with its core logic built upon "private ownership of the means of production" and the "appropriation of surplus value." However, if we step outside the framework of the zero-sum game, we might find another possibility—the relationship between the capitalist and the worker is not purely antagonistic but a form of cooperation and competition based on market rules.

The capitalist undeniably captures a larger share of wealth distribution, but this does not solely stem from the appropriation of labour; it is also because they assume a higher risk relative to other labourers. Marx only recognized that labour creates value, which is incomplete; the creation of value is not limited to labour. As one of the factors of production, capital is not inherently special compared to labour, intellectual property, or information rights. American philosopher Robert Nozick argued that the greatest source of enterprise value is risk-taking, the greater the risk, the higher the return. The capitalist bears the maximum risk of investment failure, so successful entrepreneurship yields high profits as the market's reward for that risk. Conversely, while salaried workers receive a fixed monthly wage, they do not have to risk their life savings in the event of investment failure, so they receive a relatively smaller benefit. The final distribution of value is determined by the market mechanism.

Survivor Bias: The Unseen Failed Entrepreneurs

In free market countries like the United States, the probability of business failure is extremely high (the five-year survival rate for startups is less than 30%). In the event

of failure, the capitalist can be ruined; the worker, despite limited income, does not bear the cost of losing the entire investment.

We often only see the success of prominent entrepreneurs but ignore the bleak outcomes of the vast majority of founders—this is "survivor bias." In a free market environment, entrepreneurship is a high-risk activity; while the successful enjoy high returns, the failures often silently exit the historical stage. The capitalist's super-normal profit is, to some extent, compensation by the market for the risk assumed, rather than merely the "exploitation of surplus value."

The Market Mechanism: A Collaborative Platform for Selfish Individuals

After the Industrial Revolution, the core of human economic activity shifted to a market-based collaborative system. In this system:

- Capitalists provide funding and assume risk.
- Workers contribute labour and skills.
- Managers integrate resources and optimize efficiency.
- Technical personnel drive innovation.

Everyone pursues the maximization of their own self-interest, but the market mechanism ensures that these selfish behaviours ultimately form collaboration. Supply and demand determine the distribution of wages and profits, and the spirit of contract ensures the stability of cooperation. Workers are not passively exploited but advocate for their rights through market negotiation; capitalists are not pure predators but risk-takers and organizers in the economic cycle.

Although the free market might widen the wealth gap, a larger gap does not necessarily mean the poor are poorer. In a healthy market environment, even the absolute living standards of the lowest-tier labourers can improve (as seen in China after the Reform and Opening-up). The relationship between capital and labour is more like a dynamic equilibrium—capitalists receive a risk premium, workers receive stable income, and the market drives the growth of total social wealth through competition and innovation.

The essence of capitalism is not the exploitation described by Marx but a cooperative system where risk and reward are matched. Of course, this does not mean the market is flawless—issues like lack of regulation, rent-seeking, and monopolies still need to be corrected. But acknowledging the market's collaborative nature may help us view the essence of economic growth, wealth disparity, and labour relations more rationally, thus exploring a fairer and more sustainable development model.

The Role of Government

One strain of left-wing argument suggests that developed countries are rich because they have acquired more material resources through plunder. Poor countries are poor because they are continuously exploited by developed nations. In the author's view, this argument reverses cause and effect. Developed countries are rich because they have a strong ability to utilize resources, and their institutions and culture can organize

resources more efficiently to create wealth. Therefore, resources continuously flow toward them. Otherwise, even if they were briefly wealthy, they would soon decline, much like the Spanish Empire, which once plundered vast amounts of gold and silver. Some countries, such as Venezuela and Russia, possess massive oil resources but have fallen into the resource trap. Due to excessive reliance on oil, other industries fail to develop. Conversely, some developed countries, like Japan, are resource-poor.

The true core wealth of developed nations lies in their large, creative entrepreneurial class. The more creative entrepreneurs a country can cultivate and attract, and the higher the ratio of entrepreneurs to ordinary labourers, the stronger that country's ability to create wealth, the lower its unemployment rate, the higher its workers' wages, and the more developed its economy will be.

Some left-wing economists blame the wealth gap on an overly free market. In the author's view, the true wealth gap comes precisely from the failure of market mechanisms caused by excessive policy intervention: once public power intervenes in the market, and labour cannot be allocated according to demand, it inevitably leads to those with power obtaining unequal resources, widening the wealth gap. The market failure in many democratic countries in Latin America and Southeast Asia stems from widespread corruption and collusion between officials and businesses, and the persistent poverty of the poor severely undermines the institutional advantages of democracy.

Many Chinese people believe that the current poverty in Latin American countries comes from blindly adopting Neoliberalism. In fact, this logic has major issues. First, Latin American countries did not embrace free markets from the start. Before the 1980s, most Latin American countries adopted import-substitution economies, but their economic development was even worse then. The implementation of Neoliberalism in Latin America was less about the 'coercion and inducement' of American imperialism and more of a rebound after old policies reached a dead end. Furthermore, not all Latin American countries embraced the free market; Venezuela, for example, maintained high tariffs, yet its economic situation is even worse. The fundamental reason poor countries in Asia, Africa, and Latin America cannot escape poverty lies internally, in the "dual failure" of the market mechanism and the democratic mechanism.

I finally arrive at a familiar topic. From Adam Smith to Milton Friedman, liberalism has dominated Western economics. The core tenets of Neoliberalism are trade liberalization, reduced government economic intervention, fiscal austerity, and enterprise privatization. These are not new, being consistent with "Old" Liberalism. Neoliberalism did not benefit only "a small group of elites." Taking China as an example, the Reform and Opening up lifted over 200 million rural people out of poverty; even the groups that benefited the least in the free market are richer now than before the reform.

Undeniably, the current wealth gap in China is too large, but how much of this disparity is due to market reform, and how much is due to the failure of inherently fair market mechanisms caused by institutional loopholes? Neoliberalism is merely an economic policy; it cannot, and should not, replace political reform. In the West, after the Great Depression of 1929, Keynesianism and Neoliberalism have been essential and

inseparable, like the two ends of a seesaw. From the New Deal, to Reaganomics, and most recently to Bidenomics, the changes are merely additions and subtractions to the degree of state intervention in the market. What is ignored by most economists is that, for late-developing countries like those in Latin America, the imperfect democratic system is the root of economic problems. The ultimate path for late-developing nations to escape their plight is not about choosing between Keynes and Hayek, but about how to eliminate the pervasive corruption and official-business collusion underlying the market.

Chapter Seven: Autonomy and Balance of Power

Individualism (Personal Sovereignty)

The evolution of human civilization from collectivism to individualism reflects profound transformations in both material foundations and values. In the agrarian age, when productivity was low, the harsh survival environment shaped a collectivist ethic embodied by the saying, "The small river runs dry if the great river has no water." Rulers viewed their subjects as quantifiable resources, and individual will was dissolved in the grand narrative of "securing borders and pacifying the populace"—peasants were conscripted to build the Great Wall, young men were enlisted for distant campaigns, and merchant property could be seized at any moment for military supplies. This mode of survival created a unique political philosophy: individual free will was subjugated to the monumental narrative of imperial power.

If the supremacy of imperial power in the agrarian age was like a towering river, the governance philosophy of the democratic age is like an attentive stream. When the market economy creates geometrically increasing wealth, individuals realize their self-worth through labour and innovation in a free market environment. This is an era that respects the individual more. Progress in science and technology has brought innovation in medicine, education, and social welfare, while the rule of law and democratic institutions provide a solid foundation for individual rights and freedoms.

Some scholars summarize three specific policies in the late European Middle Ages that promoted the development of individualism:

1. **Monogamy (One Husband, One Wife):** Under the original extended family model (often four generations living together), family power was usually concentrated in the hands of the elder, and individual interests often had to yield to family interests. Monogamy gradually disintegrated the family model based on kinship, meaning property was no longer jointly owned or controlled by the extended family. Each individual became responsible only for their own small family unit.
2. **Establishment of Land Property Rights:** In the late Middle Ages, with the turnover of land ownership and the development of the land economy, individual land property rights became more clearly and stably established. Feudal lords gradually allowed individual peasants to own property and enjoy corresponding property rights over it. The establishment of private property is the foundation for the formation of contracts.
3. **The Rise of the Commercial Spirit:** Prosperous commercial cities emerged along the Mediterranean coast. Merchants tended to pursue personal gain, actively participating in trade activities, and striving for wealth and social status. Their spirit of individualism promoted economic prosperity and urban development, creating the conditions for the formation of republican systems.

Mediterranean City-States

Modern Chinese intellectuals, such as Liang Qichao, Hu Shi, and Qian Mu, often discussed democracy through Greece and republicanism through Rome. Today, I will

talk neither about Greece nor Rome. This is because both are too early; while they have deep historical roots with contemporary representative democracy, they lack a direct line of inheritance. The two indispensable sources for contemporary democratic politics are the Maritime Republics of Italy and English aristocratic politics.

Florence was a center of the Italian Renaissance and an exemplar of the city-state autonomy system. In the 12th century, Florentine citizens gradually shook off the influence of foreign rulers and established an independent republican government. To safeguard their interests and rights, the city's residents began to organize themselves, forming various guilds, corporations, and associations. These non-governmental organizations managed and controlled city affairs by drafting rules and regulations and establishing trade standards.

Guilds were formed during the citizens' struggle against noble rule, based on common trades to fight for their rights. The earliest were the wealthy or prominent major guilds, such as the Wool Manufacturers' Guild, the Money Changers' Guild, and the Judges' and Notaries' Guild. By the 13th century, Florence had 21 guilds, including 7 major guilds and 14 minor guilds. Guilds formed the early basis of industry self-governance. Only guild members were eligible to participate in politics, and government offices were proportioned among the major and minor guilds.

Secondly, there were Communities (Neighborhoods). Florence was divided into 4 districts, 16 administrative wards, and many more church parishes. Since guild members were often scattered, to facilitate training and rapid deployment for combat, they reorganized into residential units. This marked the beginning of Florence's administrative districts. Communities formed the early basis of local self-governance. Administrative wards became the grassroots organization of the government. The election of the executive council (Signoria) and legislative assemblies started here, and taxes were also uniformly collected on a district basis.

The Republic of Florence was not unique in the medieval Mediterranean. Similar organizational structures appeared in other Mediterranean city-states like the Republic of Venice and the Republic of Siena. These city-states were located on the coast of Italy, far from the main political centers of the Holy Roman Empire, thus they were not directly ruled or interfered with by the Empire. This created the conditions for the independence and autonomy of the Maritime Republics.

The Birth of the Dutch Parliamentary System

In 1530, the Italian Renaissance came to an abrupt halt with the invasion of Charles V. However, the seeds of autonomy had taken root, and the tradition was inherited by the emerging maritime power, the Netherlands. The Netherlands was one of the earliest countries to adopt a parliamentary system. In 1581, the northern Dutch provinces declared independence from Spain and established the Dutch Republic.

The Dutch parliamentary system was more mature than that of the Mediterranean city-states. After breaking free from Spanish rule, this low-lying country developed a unique dual-track parliamentary system that perfectly combined local autonomy with professional representation.

The Dutch Parliament consists of a First Chamber (Senate) and a Second Chamber (House of Representatives). The Senate's operations reflect a distinct localist characteristic. Representatives from each province argue strongly for their regional interests in Parliament. This institutional design ensures that central decisions must accommodate the specific needs of all regions. Taking the issue of Ukrainian refugee settlement as an example, provincial representatives must ensure their region receives adequate financial support while also coordinating a national resource allocation plan. This central-local balancing mechanism effectively prevents the excessive concentration of power.

The Second Chamber, on the other hand, provides a platform for the expression of professional interests. The various political parties are essentially spokespersons for different professional groups: the CDA speaks for farmers, the SP champions workers' rights, the VVD represents the interests of entrepreneurs, and the D66 reflects the concerns of intellectuals. This system of representation, organized by profession, allows major interest groups in the market economy to participate in policy-making. On issues like labor negotiations and tax reform, all parties engage in rational debate through the parliamentary platform, ultimately achieving a balance of interests.

What if a profession lacks representation in Parliament? There is no need to worry. The Netherlands also has thousands of Non-Governmental Organizations (NGOs), such as trade unions and business associations, which form a third pole alongside the government and private companies. Many people still view trade unions merely as organizations that orchestrate worker strikes. In the Netherlands, however, trade unions not only check private companies but also counterbalance the government. Trade unions have considerable power; they can directly sue the government and establish their own media, such as newspapers and television stations.

Take the recent example of virus prevention measures. In 2020, the Dutch government introduced restrictions, including a law prohibiting social gatherings after 9 PM. Soon after, an NGO called Viruswaarheid (Virus Truth) sued the Dutch government. After deliberation, the court ruled that the government's law infringed upon citizens' freedom of movement, forcing the Dutch government to repeal the law. It is not uncommon in the Netherlands for the government to be sued by an NGO and for the court to overturn a government order.

Democracy and Constitutionalism

Democracy addresses the problem of the legitimacy of law. In a modern nation, law requires authorization from the entire nation. Citizens elect representatives, who form the legislature. The legislative process in a democratic country is a process of legal authorization involving the participation of all citizens. This process guarantees popular sovereignty but does not guarantee that the people's power is subject to supervision and constraint, nor does it guarantee transparency and fairness in the execution of law. A monarch who governs poorly becomes a tyrant; a democracy that governs poorly becomes a mobocracy (tyranny of the majority). Both tyranny and mob rule are disasters, and neither is inherently just. Historically, the harm caused by the tyranny of the majority is no less than that caused by a tyrant.

Therefore, in modern society, democracy must be reinforced by constitutionalism to function effectively. Constitutionalism (限权 *xiàn quán*, limited power) is the corresponding concept to dictatorship. The design of a constitutional system is intended to limit both the tyrant and the mob. Constitutionalism is about power being subject to supervision and constraint. If the emperor's power is unchecked and he acts recklessly, it is called tyrannical dictatorship. If the common people's power is unchecked and they act recklessly, it is called mob dictatorship. Constitutionalism seeks to confine everyone's rights within a cage and constrain them by establishing a set of rules of the game. If the essence of democracy lies in autonomy (self-governance), the core of constitutionalism is limiting power.

In a constitutional system, state power is divided into three mutually independent branches: Legislative, Executive, and Judicial. The President or Prime Minister can dismiss cabinet members but has no authority to directly interfere with legislation or initiate prosecution against cabinet members. Although the legislature holds legislative power, it cannot overstep its bounds to execute the law. The courts conduct trials entirely independently, free from interference from other branches of power.

- Emperor in a rage: "Take that treacherous minister out and execute him!" This is certainly not constitutionalism, because there is no independent judicial investigation or evidence gathering; justice depends entirely on the emperor's pleasure.
- Emperor in a rage: "Hand that treacherous minister over to the Ministry of Justice for sentencing!" This is a small step toward constitutionalism, but it is still not constitutionalism, because the power to initiate prosecution remains with the Emperor. Even setting aside the independence of the judiciary during the imperial era, the decision of whether a minister should be prosecuted requires an evidence-gathering process.

In a constitutional system, the President does not have the power to prosecute a minister. While the President holds the power of appointment and removal and can fire a minister, they cannot directly bring a criminal charge to court. The power to prosecute a minister rests with the Department of Justice (Judiciary). The President can submit a proposal to the Department of Justice, but in deciding whether to prosecute an official, the Department of Justice typically conducts an independent investigation and decision-making, proceeding based on evidence and legal procedures, and initiating a lawsuit in Federal Court if necessary.

The Foundation of British Constitutionalism

Speaking of the history of constitutionalism, one must mention the Magna Carta in England. A centralized authoritarian dynasty, similar to those of the Ming and Qing, was certainly unfavorable to the emergence of constitutionalism, but a fragmented model, like the Warring States period, also could not produce it. The conditions for constitutionalism are neither purely feudalism nor strong central authority, but a state between fragmentation and unity. Take medieval England as an example. The power of the Crown and the nobility were closely matched. Specifically:

1. The King's territory occupied about half the country's land, while the nobility distributed the other half. This maintained a moderate royal power that could counterbalance the nobility.
2. The nobles' estates were scattered and non-contiguous, interspersed between the King's territory. No feudal domain could conquer other regions without crossing the King's land. This meant the greatest social conflict was not between feudal domains but between the feudal domains and the King.
3. The British mainland was not under constant threat of war, so there was no need to centralize power to defend the nation.

It was due to these three conditions that the power struggle between the nobility and the King was prolonged, eventually leading to the creation of the Magna Carta (1215).

In ancient Chinese history, the period closest to the Magna Carta era in England is the Eastern Jin Dynasty. Chinese people can imagine the Magna Carta as an agreement on power distribution signed between the Sima Emperor and several major families (such as the Wang, Xie, Chi, Yu, and Huan families). Of course, my use of "similarity" is only in terms of a longitudinal comparison within Chinese history; there are significant differences between the Eastern Jin and England. For example, the Eastern Jin faced threats from the North, making the primary contradiction always the Northern invasion, not the tension between the powerful families and the Emperor.

In the first few centuries of the power struggle between the English nobility and the Crown, the nobility was at a disadvantage. Consequently, the Magna Carta was practically a dead letter for most of the time after its signing. When a country faces war, it needs to centralize power to resist invasion. This is the time when central authority is most easily strengthened. The Hundred Years' War strengthened the royal power in both England and France. The strengthening of royal power in France can be traced from the 14th century to Louis XIV. In England, the previously disadvantaged nobility grew increasingly powerless. The Tudor Dynasty marked the period when the English monarchy was at its strongest.

If the discovery of the New World had not occurred, Britain might have followed a path similar to France's with strengthening royal power. However, the discovery led to vast "overseas territories" and the emergence of the "New Nobility" in England. This dramatically shifted the power balance between the Crown and the nobility. The power of the nobility rapidly increased with the growth of the emerging bourgeoisie, which eventually prompted the later Bill of Rights. The subsequent story is well-known: after the Bill of Rights (1689), the English nobility invited Mary II, who had been living in the Netherlands, to be Queen, and the Dutch King William III also became the King of England. William III introduced mature Dutch commercial technology to Britain, established the Bank of England, and unified the new English currency. These measures led to a leap forward in British commerce. Britain quickly surpassed the Netherlands and France, becoming the undisputed maritime hegemon of the modern era.

The Formation of the Middle Class

After William III's death, the throne was inherited by Mary II's sister, Anne. When Queen Anne died in 1714, the English throne passed to George I, the Elector of Hanover, a distant relative of the Stuart family. George I neither understood English nor the British situation, and fearing embarrassment at cabinet meetings, he broke with convention and stopped attending or chairing cabinet meetings. The Cabinet further shifted its responsibility from the King to Parliament. The formation of the Cabinet system in the 18th century marked the shift of political power from the monarchy to Parliament, but democracy at this time was still limited to a minority elite. The suffrage rate of only 4.3% during George I's reign reflects the limited political participation of the time.

From the start of the Industrial Revolution, overproduction became a major problem in Britain. As we discussed in the previous chapter, unlike agrarian civilization, the bottleneck of the Industrial Age was not on the supply side but on the consumption side. Industrial production follows the mechanism of "production expanding consumption, and consumption promoting production." Factories in Manchester could continuously produce cotton cloth, but the market's absorption capacity became the bottleneck. In the past, insufficient agricultural output limited population growth, but now, insufficient consumption power hindered the continuously expanding production. 19th-century Britain, like the 20th-century US and 21st-century China, encountered the problem of low consumption and overproduction.

Britain's solution was twofold: expand emerging markets abroad and increase workers' incomes domestically to boost domestic demand. One consequence of the former was dragging the old Qing Empire into the modern world system; the latter led to the rapid rise of the British middle class, who replaced the rich as the main consumer group.

The healthy development of the market economy fundamentally relies on a virtuous cycle where all citizens share the benefits of development. Sustainable wealth growth must be built on the foundation of simultaneous increases in workers' income and consumption capacity. Cotton mill owners in 19th-century Manchester initially pursued a cruel system of exploitation, leading the working class into a vicious cycle of "impoverishment accumulation." But they soon realized that when workers could barely afford basic necessities, there were simply not enough buyers for the cotton cloth the factories produced. This sharp contradiction between production and consumption was eventually mitigated through union movements and social welfare legislation, leading to a virtuous development model of "high wages - high consumption - high investment." When the hourly wages of ordinary workers were sufficient to support car purchases and overseas vacations, the entire national economy gained unprecedented vitality.

Starting in the mid-19th century, the main consumer force in Britain was no longer the small elite but the stable middle class. The rise in economic status inevitably translated into political demands. On the one hand, the state increasingly needed the participation of ordinary citizens for taxation; on the other hand, activities like foreign wars involved the real interests of the workers. From the 19th to the early 20th century, voter turnout in Britain steadily increased. After three reform acts in 1832, 1867, and

1884, the number of voters reached 4.5 million, covering almost all adult males. Women over 30 gained suffrages in the 1918 Act, and the voting age limit for women was lowered to 21 in 1928. Universal adult suffrage was finally achieved.

Chapter Eight: The Disadvantage of Late Development

Grassroots Transformation

If we count from the end of World War II in 1945, humanity has been operating under the existing international order for 80 years. Yet, in these eight decades, poor countries have largely remained poor. Only a handful of nations have successfully broken through to join the club of rich countries. In the 1980s, the Asian Tigers emerged, successfully leaping over the middle-income trap. Later, with the Reform and Opening-up, Mainland China gradually completed industrialization and urbanization, also showing a strong trend toward industrial breakthroughs. Starting with this chapter, we will return to a Chinese perspective to discuss the dilemmas and breakthroughs of this ancient empire during its modernization transition.

In the previous three chapters, we discussed the modernization process in Europe from three angles: industrialization, marketization, and democratization. Late-developing countries often assume that if they can replicate the successful experiences of the West, achieving modern transformation should not be too difficult. Chinese people before the 20th century thought the same way. If we divide modern Chinese history, the 1920s serve as a key node. The Beiyang era can be seen as a continuation of the late Qing New Deal. Starting in 1901, after the Qing court returned to Beijing, China began a top-down reform process of learning from the West. Early Republican efforts, such as intellectuals advocating for "Mr. Democracy" and "Mr. Science," and promoting "industrial salvation" and a democratic republic, were all similar attempts. This unprecedented era of great change culminated in the New Culture Movement.

However, as modernization progressed, intelligent Chinese people realized that transformation was not as simple as imagined. By the 1920s, both Chinese Nationalist Party (KMT) and the early Chinese Communist Party (CCP) realized that modernization could not be achieved by simply transplanting Western systems; it required a profound social transformation that touched the grassroots to advance further. Some intellectuals at the time shifted the focus of reform to changing the old "national character." In this chapter, the author discusses this transformation through three dimensions: land reform, secularization, and capital accumulation. Intriguingly, these three critical reforms were difficult to complete under a democratic system, suggesting that inefficient democracy struggled to achieve modernization reform, while a certain degree of autocratic government held an advantage.

In the 1920s, China's intellectuals experienced their first major split.

A first group included the Jiayin Faction led by Zhang Shizhao, and later the Rural Reconstruction Movement represented by Liang Shuming. These intellectuals believed that there were no irreconcilable class contradictions in China's ancient countryside. They thought China could achieve modernization while maintaining the original land ownership system. Later, these people were jointly suppressed by the KMT and the CCP, and their ideas were likely underestimated. Without Soviet intervention, China might have followed a path similar to Latin America, characterized by the alternation of military and democratic governments, strong warlords, and a

weak central government. Of course, considering the Japanese factor, the outcome would have been even more complicated, and it is hard to believe China could have achieved national independence under the fragmentation of the Beiyang Government.

On the other hand, the KMT and the CCP shared a consensus on the need to eliminate the old system. Both parties turned their gaze toward the Soviet model. The Soviet system of high autocracy and party-state integration was exceptionally suited for reforms that penetrated the grassroots. Although the KMT and CCP agreed on destroying the old system, they completely differed on the kind of new world they intended to create. The KMT hoped to create a capitalist world similar to the West, viewing the Soviet model merely as a means, not the end. In contrast, the CCP's ideal was a communist world where "the world belongs to all." In the following 1930s and 1940s, China's intellectuals experienced their second major split, gathering separately in Yan'an and Chongqing during the War of Resistance against Japan.

In the long-term game between the KMT and the CCP, the Communist Party (CCP) was more ruthlessly committed to the authoritarian model it adopted than the Kuomintang (KMT) was, making the CCP a more formidable and ultimately successful force. Fortunately, Chiang Kai-shek preserved a piece of unblemished land in Taiwan to realize his ideals, setting up a comparative sample for a different path to modernization. In Taiwan, the KMT government completed land reform, Confucian reform, and the primitive accumulation of capital at a lower cost. The Mainland, however, went through this process at the cost of immense humanitarian disaster. This chapter will discuss the path China explored at a great cost during its modernization, a path that offers lessons for other Third World countries.

Land Reform/Revolution

Land reform is fundamental and of paramount importance. On the one hand, the employment relationship between landlords and tenant farmers hindered social development; the feudal land system bound a large amount of labor, preventing it from supplying the market and workforce needed for industrial development. Revolutionary change was necessary to liberate productive forces and boost industrial growth. On the other hand, without dismantling the employment relationship between landlords and tenant farmers, it would be difficult to create conditions for the subsequent secularization and industrialization. Relationships based on gentry self-governance, similar to those in the novel *White Deer Plain*, would be hard to break, and new ideas would struggle to penetrate tradition and the countryside.

Not all land revolutions require land nationalization. For instance, Kemal Atatürk's land reform in Turkey preserved rich peasants and owner-cultivators. Iran's Pahlavi Dynasty also attempted similar land reform, but it failed and collapsed after the Islamic Revolution. Land reforms in Mainland China, Taiwan, North Korea, and South Korea all had land nationalization as their ultimate goal (with the socialist transformation of the countryside ending in 1956 in the Mainland).

Land reform, as a major social transformation issue in 20th-century China, left two distinct trajectories across the Taiwan Strait. The Mainland completed "land distribution" through violence and extremism, at the cost of violently purging the

landlord class; Taiwan, under Chiang Kai-shek's leadership, adopted a mild, institutionalized, and compensatory approach, which achieved land redistribution while maintaining social stability and economic growth. Taiwan's reform reflected an administrative logic of "people-centered governance," while the Mainland's reform, guided by the principle of "taking class struggle as the key link," descended into "revolutionary fanaticism." As historian Yu Ying-shih said, "Taiwan traded reform for stability; the Mainland traded revolution for disaster."

Taiwan

Taiwan's land reform was carried out in three stages:

1. "375 Rent Reduction" (1949): Stipulated that the rent collected by landlords could not exceed 37.5% of the harvest, significantly reducing the burden on tenant farmers. This policy did not deprive landlords of their ownership but adjusted the interest distribution through administrative means.
2. "Sale of Public Land" (1951): Government land or land confiscated during the Japanese colonial period (such as former Japanese farms) was distributed to landless farmers, easing land conflicts.
3. "Land to the Tiller" (1953): The government purchased excess land from landlords with compensation in the form of "land bonds + cash." Landlords received compensation and were guided toward industrial and commercial investment, while the state gained land for urbanization and industrialization.

From the perspective of property rights continuity, whether through rent reduction or land purchase, changes in property rights involved clear compensation and legal procedures. The landlord group was not entirely eliminated but was guided toward investment in commerce and industry. Taiwan's land reform achieved the minimum social cost, without large-scale violent conflict or predatory extraction of rural surplus. As a result, rural consumption power rapidly increased after the reform, driving the development of light industry. Furthermore, land reform was seamlessly integrated with industrialization: the labor and capital released from the land (compensation bonds, cash) became crucial resources for urbanization and manufacturing development.

Mainland China

Land reform in Mainland China was effectively divided into two stages:

1. Violent Redistribution (1950–1952): The new China quickly completed land redistribution through violent revolution, but it was accompanied by significant violence and social division. The violent nature of the land reform was determined by the CCP's characteristic dualistic theory, which held that the landlord class and the peasants had irreconcilable class contradictions. Historian Gao Wangling estimates that "approximately 3 to 5 million people were killed during the land reform process." Its shadow, like a curse, hung over the lives of the descendants of these "Black Five Categories" (landlords, rich peasants, counter-revolutionaries, bad elements, and rightists), who suffered continuous political persecution for decades thereafter.

2. **Socialist Transformation (1953–1955):** This stage led to the nationalization of peasants' land. Under the guidance of the "General Line for the Transition Period," the state entered the so-called Socialist Transformation period. This transformation targeted not only industry and handicrafts but also carried out a complete institutional restructuring of agriculture. Its core was to effectively collectivize (nationalize) the land peasants received during the land reform through the Cooperative Movement. The land distributed to peasants during the land reform was quickly concentrated back into the hands of the collective and the state within just a few years, forming de facto land nationalization.

Through collectivization, the state could directly procure grain (the "Unified Purchase and Sale" system), acquiring the agricultural surplus at low prices to fund heavy industry construction. This was a vital source of funding for China's industrialization but also the root cause of the long-term impoverishment of the peasantry. While collectivization formally eliminated class differences in the countryside, it also caused peasants to lose their independent economic status once again, becoming producers dependent on the collective and the state. This centralized management maintained stability in the countryside, and even during the Great Famine when tens of millions starved, the grassroots peasantry was unable to organize effective resistance that would trigger social unrest.

From the perspective of national industrialization, this approach did achieve the concentration of agricultural surplus in a short time, realizing a Soviet-style "catch-up strategy." However, from the perspective of peasant welfare and sustainable agricultural development, this policy reversed the productive forces released by land reform, causing the countryside to relapse into institutional poverty. Scholar Philip Huang pointed out that post-land reform, China's small-peasant economy had the opportunity to gradually transition into modern agriculture based on family operations, but collectivization interrupted this possibility. The long-term cost included not only low agricultural efficiency but also the solidification of the urban-rural dual structure.

Secularization

In Chapter Two, we mentioned that ancient civilizations across Eurasia constructed religious policies suited to their local context, aiming to optimize the costs of rule and war mobilization. Relative to Catholicism in Europe, Islam in the Islamic world, and the Caste System in India, China governed its populace primarily using Confucianism, based on the Song-Ming Neo-Confucianism. China's secularization should have been the least costly; it only required removing the religious elements from traditional Confucian thought and replacing the Three Cardinal Guides and Five Constant Virtues in Confucian classics with secular laws and values.

Taiwan

The secularization process led by Chiang Kai-shek and Chiang Ching-kuo in Taiwan did not adopt a policy of outright destruction of traditional culture. Instead, through academic and institutional reform, they stripped traditional Confucianism from the structure of political power, allowing it to retreat into the spheres of culture and ethics.

They understood that completely negating Confucianism would not only cause a great psychological rift in society but also instantly deprive the old social order of its legitimacy and cohesion, a highly risky proposition for a society on the Cold War frontline. Therefore, Taiwan's approach was to "transform religiousness into cultural quality and political nature into academic quality."

- The religious elements (such as the Mandate of Heaven, the sanctification of the Confucian ceremony, and absolute obedience to the emperor) were weakened or removed.
- The political elements (such as the core of the Three Cardinal Guides: ruler over subject, father over son, husband over wife) were no longer legally enforced, being replaced by secular laws such as civil and criminal codes.
- The cultural elements (such as benevolence, integrity, ritual, and self-cultivation leading to the governance of the state) were incorporated into education and public moral construction.

The New Confucianism and New Neo-Confucianism advocated by Chiang Kai-shek were primarily tools for moral education and cultural identity, used to resist the erosion of totalitarian ideology while not hindering the smooth transition of the social system toward modernity and the rule of law. This "mild secularization" had several notable features: its greatest advantage was the low social psychological cost. It avoided the massive social trauma of the mainland's violent, accusatory, and "Destroy the Four Olds" methods, preserving cultural continuity and ensuring a smoother social transition, thereby establishing a stable social environment for economic modernization.

Mainland China

Secularization in the early years of the CCP government was similar to Taiwan's: the goal of removing Confucian influence was achieved through a series of movements promoting basic education, women's liberation, and simplified characters. Land reform changed the hierarchy in the countryside, providing the conditions for rural areas to accept modern laws and education.

We can divide the timeline after 1949 with 1956 as the demarcation point. The political movements before 1956, despite causing huge humanitarian disasters, had their historical justification and met with little disagreement within the Party. By 1953, the transformation of the old system was essentially complete. The period from 1953 to 1956 was one of socialism based on the Three Great Transformations, which were also completed by 1956. Starting with the 8th National Congress of the CCP, the Party was practically split between the Maoist line, advocating continuous revolution, and the Liu-Deng line, focused on socialist construction.

The 20 years following 1956 were essentially Mao Zedong, by his own will, leading the entire society in a frantic rush towards an unachievable ideal. The failure of the Great Leap Forward was caused by the inherent contradictions of socialism, but Mao failed to recognize that the failure stemmed from theoretical problems, attributing it instead to 'certain ambitious elements in the Party, Soviet agents,' or the resurgence of feudal remnants. Based on his personal experience, he stubbornly intensified his anti-imperialist and anti-feudal efforts. The political movements after 1956 were neither necessary nor had any positive effect, serving only to cause incalculable humanitarian

disasters and massive spiritual and cultural losses. Such widespread brutality and lack of law cannot be excused as mere 'overcorrection.'

In contrast to Taiwan's mild cultural modernization path, the "Destroy the Four Olds" movement during the Cultural Revolution followed a path of mass violence. Red Guards and various rebel groups were encouraged to directly attack the social order:

- **Cultural Heritage Destruction:** Historical sites, temples, steles, and artifacts suffered massive destruction; the Beijing Confucius Temple, ancient temples in Shanxi, and the Dunhuang murals were all impacted.
- **Academic and Education System Collapse:** Libraries were burned, classical works were criticized or destroyed, universities closed, and intellectuals were denounced, sent down to the countryside, or imprisoned.
- **Privatization of Personal Life:** Folk customs like wearing a *qipao*, having long hair, holding weddings, or giving New Year greetings could be deemed "Four Olds" and subject to humiliation or assault.
- **Replacement of Legal Order:** Mass struggle sessions, rampant house searches, public humiliation, and corporal punishment meant that individual dignity and basic rights were completely lost. These actions were essentially the devolution of political power to violent masses, leading to the abdication of law, and socialism completely degenerated into anarchism.

Primitive Accumulation of Capital

Taiwan

Taiwan's process of primitive capital accumulation was completely different from the mainland's model of "price scissors—state extraction of agricultural surplus—heavy industry priority." It was characterized by mildness, gradualism, and market orientation. In the early period, the main driver of capital accumulation came from external aid. Between 1951 and 1965, US economic aid totalled about \$1.5 billion (a huge sum at the time), used for infrastructure construction, raw material imports, and technology transfer. US aid provided not only funds but also industrial management techniques and agricultural improvement methods, acting as startup capital for Taiwan's accumulation and avoiding large-scale internal predatory accumulation.

Starting in 1965, Taiwan moved toward an export-oriented path, from light industry to gradual upgrading to heavy industry.

- **Export Processing Zones (1966):** Attracted foreign investment to set up factories, boosting the export of light industries like textiles, electronics, and plastics.
- **Agricultural-Industrial Mutual Promotion:** Agricultural surplus was transformed into consumer demand, and light industry profits were reinvested into capital-intensive industries like machinery and chemicals.
- **Enterprise Structure:** Formed an industrial system dominated by small and medium-sized enterprises, which were flexible in adapting to the international market, ensuring rapid capital accumulation and high resilience against risk.

Mainland China

If analysed from the perspective of "primitive accumulation of capital" as defined by Marx, the People's Communes represent an extreme version—it used state power to directly expropriate peasants' means of production and surplus products, converting them into state investment capital. Economically, this method was similar to the Soviet collectivization policy but was shorter in duration and more comprehensive in scope. Its economic effectiveness was evident in the growth of industrial output value: between 1952 and 1978, China's heavy industrial output value increased dozens of times. However, this growth was achieved at the cost of sacrificing agricultural development and suppressing peasant welfare, leading to a long-term structural imbalance due to the weak agricultural base and lack of solid domestic market support for industrialization.

The modernization path during the People's Commune stage was a "catch-up model" centred on the state, prioritizing heavy industry, and relying on agriculture as the supply base. Its logic was:

1. Land reform seized land from landlords.
2. Socialist transformation concentrated land into collectives.
3. People's Communes achieved the comprehensive organization and political control of agriculture and the peasantry.
4. Surplus was extracted from the countryside to fund industrialization.
5. Heavy industry and defence industry systems were established.

The People's Commune system was not just a change in production organization; its core economic function was the maximum concentration of agricultural surplus to support industrialization. This was based on three mechanisms:

1. Unified Purchase and Sale System: The state administratively monopolized grain procurement and sales, forcing peasants to sell grain at fixed quotas and prices. The procurement price was long suppressed below market levels, transferring agricultural surplus to industrial investment.
2. "Price Scissors" Policy: Industrial products were sold at high prices while agricultural products were bought at low prices, creating a structural transfer payment through pricing.
3. Unpaid Labor Supply: Peasants were passively involved in large-scale water conservation projects, backyard steel production, and other non-agricultural labour, providing cheap labour for national industrialization.

This set of mechanisms enabled the state to rapidly concentrate enormous funds and resources for heavy industry, defence industry, and infrastructure construction, forming a typical Soviet-style catch-up model. The People's Communes, combined with the urban-rural *hukou* (household registration) system, legally separated peasants from urban residents, denying them the freedom of migration and market mobility. This institutional isolation long inhibited the rural population from entering the modern industrial system. The long-term poverty in rural areas only began to improve with the Reform and Opening up, which is a topic for the next chapter.

Chapter Nine: Accumulation and Outburst

Industrialization and Urbanization

"Industrialization" is not merely the establishment of several heavy industrial sectors, but a systematic transformation encompassing economic structural change, the deepening of social division of labor, and population migration. From a macroeconomic structure perspective, industrialization is characterized by a significant decrease in the share of agriculture in the Gross Domestic Product (GDP) (usually below 10%), while the share of industry and services rises significantly. From a microeconomic level, industrialization is embodied in the dynamic process of rural labor transfer to cities, improved agricultural labor productivity, and the restructuring of the urban-rural balance. As agricultural automation and output increase, the surplus rural population flocks to cities, participating in the construction and development process. Therefore, industrialization is inevitably accompanied by urbanization. Following industrialization, the proportion of the agricultural population typically falls below 40%, and an urban middle class begins to form.

For the industrialization of former socialist countries, we can distinguish between two meanings:

1. Industrialization in the Narrow Sense (Material Level): Many socialist countries indeed achieved the construction of industrial systems from scratch in a short period, succeeding at the material level.
2. Industrialization in the Broad Sense (Societal Transformation Level): This societal transformation generally failed because the system suppressed market mechanisms, innovation vitality, and social mobility.

In other words, the socialist system could accomplish the "starting point of industrialization" but could not sustain the "continuity of industrialization." The Soviet Union, Eastern Europe, and Mao-era China almost all experienced a similar trajectory: Mobilization-style Industrialization → Successful Capital Accumulation → Structural Rigidity Due to Non-Marketization → Stagnation of Growth → Reform or Collapse. Historically, industrialization only regained momentum when market mechanisms were reintroduced (e.g., Deng Xiaoping's reforms, Vietnam's *Đổi Mới* reforms).

Until 1979, China's rural population still accounted for over 80% of the total population. The urban-rural dual structure of the Mao era not only severely compartmentalized society but also firmly fixed peasants to the land, a design that could not breed urbanization. According to Wen Tiejun's statistics, the urban employed population decreased by about 80 million in the 1960s (even if the number is high, the trend remains clear). The withdrawal of Soviet aid was one factor, but could political movements, the Great Famine, and the comprehensive impact of the Cultural Revolution be disregarded? Educated youths being sent to the countryside and factories shutting down—these phenomena precisely led China in the opposite direction of industrialization.

The "failure of industrialization" in the Mao era lay in the limits of Mao's own understanding. As I mentioned in the last chapter, Mao's contribution was in

"destroying the old world," not building a new one. He attempted to reshape society with utopian ideals, leading him to repeatedly destroy the old world in the last 20 years of his life until the Chinese economy was brought to the brink. However, true industrialization is a social revolution involving all citizens, including peasants; it is not just the accumulation of technology and capital, but the restructuring of population, consumption, and markets.

Readers of this series will recall that the logic of capital operation is a positive cycle where consumption drives production, and production promotes consumption. Stimulating production requires boosting domestic demand, and boosting domestic demand requires increasing urban population and consumption power. Achieving this cycle requires market mechanisms and the free flow of population. Fortunately, Deng Xiaoping's understanding was more pragmatic. He may not have fully grasped the entire process of industrialization, but he intuitively launched the Reform and Opening-up.

China's industrialization in the true sense was not the "heavy industrialization movement" of the 1950s, but the sustained transformation process that emerged within a market-oriented framework after 1978. Only after hundreds of millions of rural migrant workers moved to cities over the three decades of Reform and Opening-up did China's industrial output value, urbanization rate, resident income, and consumption level enter a trajectory of systemic growth. China's urbanization rate was only 17.9% in 1978; it exceeded 63% by 2020. Meanwhile, the share of agricultural output in GDP dropped from about 30% to roughly 7%.

The Historical Process of Reform and Opening-up

The development from the Third Plenary Session of the Eleventh Central Committee (1978) to the COVID-19 pandemic (2020) can be broadly divided into four stages:

1980s: The Exploratory Phase This phase established the market-oriented direction of reform and initiated preliminary institutional experiments. Deng Xiaoping's "Black Cat, White Cat" theory set the overall pragmatic tone for the next four decades of reform, while the strategy of "crossing the river by feeling the stones" embodied a gradual, conservative reform wisdom. This combination of pragmatism and conservatism was evident both in domestic governance and foreign openness strategies. Key measures included rural reform (Household Responsibility System), the rapid expansion of Township and Village Enterprises (TVEs), and the establishment of Special Economic Zones (SEZs), which broke the shackles of the planned economy and established a market direction. Notably, the rural sector grew rapidly during this stage, but as the rural financial system contracted and state banks became commercialized in the early 1990s, rural funding sources were constrained. Peasants were forced to leave the townships and enter cities for work to maintain livelihoods, shifting the reform focus from the countryside to the cities.

1990s: The Take-off Phase This marked the move from "experimental exploration" to "institutional finalization." Three crucial institutional reforms reshaped the national economic structure: fiscal decentralization reform (tax-sharing system), State-Owned Enterprise (SOE) reform, and financial marketization. The tax-sharing system

reshaped the central-local fiscal power landscape, creating a financially "strong center, weak locality" structure, and institutionally paving the way for local governments to later rely on land finance. With limited tax retention, local governments had to finance themselves by leasing land, driving the financialization of real estate land attributes. SOE reform, through the "grasping the large, letting go of the small" policy and joint-stock transformation, improved corporate efficiency but led to massive layoffs, with these laborers later becoming the key human resource foundation for manufacturing expansion. Financial marketization pushed enterprises to list for financing and banks toward commercial operation, but also brought potential risks of resource misallocation and financial fragility. Overall, 1990s reforms significantly strengthened the market's role in resource allocation and improved industrial efficiency, but some side effects were masked by subsequent high growth, only becoming evident in the 2020s.

2000s: The Deepening Phase This was the decade when the Reform and Opening-up fully advanced toward "export-oriented industrialization." After joining the WTO, China became a critical node in the global manufacturing supply chain, and export-driven manufacturing rapidly expanded. The massive influx of foreign capital brought not only funds but also technology, management, and global market systems. Concurrently, hundreds of millions of migrant workers moved to cities for employment, forming a vast urban working class and a new consumer group, expanding industrialization in both scale and space. China truly became the "World's Factory." Shi Zhan, in *The Hub*, points out that China's rise changed the traditional two-tiered structure of "raw material countries—industrial countries" into a new global three-tiered structure of "resource suppliers—emerging manufacturers—developed consumers." This restructuring supported the rise of Chinese manufacturing but also drove the trend of hollowing out physical industries in developed countries.

2010s: The Peak Phase This phase marked China's economy reaching a historical high in terms of volume, while simultaneously entering the "plateau phase" of growth model transition. China's manufacturing system became nearly complete, with a group of enterprises reaching the global forefront in areas like smartphones, new energy vehicles, photovoltaics, and high-speed rail equipment. China began transforming from the "World's Factory" into a major industrial power with its own brands and technological capabilities. However, behind the impressive industrial figures, the growth structure showed signs of fatigue. Over-reliance on investment-driven growth became a common phenomenon, with central and local governments relying on infrastructure, real estate, and large-scale park development to stimulate the economy. The concentration of capital and resources fueled short-term prosperity but accumulated structural risks such as real estate bubbles, local government debt, and financial fragility. In the late 2010s, these latent issues gradually became apparent, and the appearance of prosperity morphed into structural imbalance, setting the stage for subsequent deflationary pressures and economic adjustment.

The Triple Driving Forces of Reform and Opening-up

The success of the Reform and Opening-up was not accidental but resulted from the convergence and interaction of demographic structure, international capital flows, and institutional changes at a specific historical moment. These three forces correspond to the three basic elements of economic growth—labor, capital, and institutional

efficiency—collectively forming the structural foundation for China's sustained high growth since 1978.

I. Demographic Dividend: Dual Release of Labor and Consumption Potential

The greatest contributor to the Reform and Opening-up was, without doubt, the kind, diligent, and intelligent Chinese people. In the early years of reform, China possessed the world's largest labor reserve. In 1978, the total labor force was about 400 million, with over 70% in rural areas. With the dismantling of the People's Commune system and the implementation of the Household Responsibility System, agricultural productivity significantly increased, allowing a large surplus of labor to flow to non-agricultural sectors. This shift not only solved the labor supply problem for nascent industrialization but also provided a cost advantage for urbanization and manufacturing expansion.

Simultaneously, China entered a "demographic dividend window": the proportion of the working-age population rose, and the dependency ratio fell. This meant the overall social savings rate was high, and consumption potential was vast. As the middle-income group expanded, workers were not only producers but also new consumption subjects, forming the rudimentary shape of a "production—income—consumption" positive cycle.

II. International Capital: Dual Drive of External Accumulation and Technology Transfer

The second critical driving force came from the input of international capital and technology. Deng Xiaoping proposed the "Bringing In" open-door strategy. By establishing SEZs and reforming the foreign trade system, China was able to embed itself in the international market while remaining under the planned system. The government offered tax reductions, land concessions, and policy flexibility, attracting investment from Hong Kong, Taiwan, Japan, Europe, and the US manufacturing sectors. This foreign capital brought not only funds but also management experience, modern technology, and access to global market channels.

China's accession to the World Trade Organization (WTO) in 2001 marked the institutionalization of opening-up. Manufacturing became the core engine of China's economic growth, creating a positive cycle of export trade, foreign exchange reserves, and industrial upgrading. China transitioned from the "World's Factory" to a crucial hub in the global industrial chain, forming an export-oriented manufacturing dominant growth model. The inflow of foreign capital not only achieved "initial capital accumulation" but also brought about learning effects and technology spillovers. Domestic enterprises enhanced their industrial capabilities through competition and imitation, laying the foundation for independent innovation.

III. Institutional Advantage: Dual Effect of Gradual Reform and State Mobilization

If the demographic dividend provided the "quantity" of growth, and international capital provided the "capital," then the institutional advantage provided the "quality"—the stability and coordination capacity during the reform process. The characteristic of Chinese-style reform was "incremental reform" and "institutional experimentation." The central government set the direction, and localities explored the path—from the

rural household contract system to TVEs, and from individual businesses to joint-stock reform—the reform followed a progressive logic of "local pilot → experience replication → national promotion" (the "crossing the river by feeling the stones" approach). This path avoided the risk of social collapse associated with Soviet-style "shock therapy."

Fiscal decentralization and the performance evaluation mechanism (政绩考核 *zhèngjì kǎohé*) caused local governments to act as "quasi-entrepreneurs" in economic development. The government played a key role in attracting investment, land development, and infrastructure investment, making China's industrialization speed far surpass that of most developing countries. The state's powerful mobilization capacity was particularly evident during critical periods. Whether it was responding to the Asian Financial Crisis in 1998 or launching the "Four Trillion Yuan" stimulus package in 2008, the Chinese government could swiftly organize fiscal and credit resources to achieve macroeconomic stability. This institutional "coordination capacity" is a key feature distinguishing the Chinese model from free-market economies.

The Waning of Structural Drivers

Entering the 2010s, the three structural drivers that underpinned China's Reform and Opening-up gradually entered a phase of "diminishing marginal returns."

Demographic Shift: China's working-age population peaked in 2012 and has since been in continuous decline. Accelerated aging and reduced supply of young labor led to rising labor costs and the weakening of comparative advantage in manufacturing. At the same time, the rural surplus labor force was essentially fully absorbed, ending the era of cheap human resources. The demographic dividend shifted from a "growth engine" to a "structural burden."

International Environment: The global industrial chain restructured after the 2008 Financial Crisis, putting pressure on China's export-oriented growth model. As domestic factor costs rose and external trade frictions increased, the incremental investment by foreign enterprises gradually slowed down. Simultaneously, China's own capital accumulation reached a significant scale, relatively reducing the importance of external capital. The focus shifted from "Bringing In" to "Going Out" as the new development strategy, though uncertainties in the international environment made this process risky.

Institutional Plateau: Incremental reform yielded huge institutional dividends in the first three decades, but the "easy parts" are mostly complete. The remaining deep-seated structural issues—such as property rights protection, market fairness, local fiscal dependency, and income distribution imbalance—involve the restructuring of vested interests, making reform significantly more difficult. Furthermore, macroeconomic control and the state mobilization mechanism have, to some extent, led to over-investment and debt accumulation, requiring a rebalancing of the government-market relationship.

In summary, since the 2010s, China's economic development has transitioned from a "dividend-driven" stage to an "efficiency-driven" stage. Economic expansion no longer

relies on the quantitative advantages of resources and population but must depend on technological innovation, institutional deepening, and consumption upgrading.

The Distribution Pattern of Reform and Opening-up

The Reform and Opening-up was not a top-down reform by a few elites but a historical process involving mass participation, hierarchical collaboration, and the gradual reshaping of interest structures. This was one of the few positive-sum games in Chinese society, with every social stratum benefiting from this great transformation, especially those who were diligent, intelligent, and responsible. The way and extent of benefits varied for different participants:

Peasantry (农民阶层): As the bearers of the urban-rural price scissors, this stratum started from the lowest point. Most peasants moved from initial periods of scarcity and poverty to "basic subsistence." Massive numbers migrated to cities as "migrant workers" (农民工 *nóngmín gōng*), becoming the main force for urban industrialization and infrastructure construction. Their contribution was immense—providing cheap labor and bearing the external costs of the city. However, their gains were limited: restricted by the *hukou* and land systems, they were often "mobile producers" rather than "sharers" in the urbanization process. The most successful among them might integrate into the urban middle class through settling in cities. But the majority of migrant workers became old before they became rich, lacking adequate medical and pension coverage, and ultimately became a neglected vulnerable group. The limited voice of this group forms the pain and contradiction hidden beneath the glamorous grand narrative.

Working Class (工人阶层): They bore the cost of SOE reform and were the backbone of industrial transition. During the SOE reforms of the 1990s, large numbers of state-owned enterprise workers were "laid off" (下岗 *xiàgǎng*), enduring the pains of industrial restructuring. However, their sacrifice laid the foundation for establishing modern enterprise systems, enhancing industrial efficiency, and introducing market mechanisms. Entering the 2000s, the working class became the main force of the "World's Factory"—specially manufacturing workers in the Pearl River and Yangtze River Deltas, providing solid human support for China to become the global manufacturing center. In the middle and late stages of reform, the overall income of the working class increased, but the share of labor compensation in GDP continuously declined. Their "relative benefit" from national wealth growth was lower than that of the capital and management classes. In the late 2000s, phenomena like "labor shortages" and "wage increases" suggested a slight improvement in labor bargaining power, but overall, they remained at the bottom of the global value chain.

Intellectual and Technical Class (知识分子与技术阶层): From the "system's periphery" to the "core of the middle class." In the early reform period, intellectuals experienced a "redress of wrongs" and the restoration of their status. In the 1980s, the expansion of higher education and the reconstruction of the scientific research system re-established intellectuals as the intellectual resource for economic growth. Since the 1990s, they became the designers of institutional reform and the drivers of technological innovation. After the 2000s, with the rise of informatization and the tech industry, this group formed the core of the urban middle class. Their direct gains are

reflected in career advancement, asset accumulation (especially urban housing), and cultural capital advantages. This class had high satisfaction in the early stages, but later also bore the structural pressure of "involution" (内卷化 *nèijuǎn huà*) and "middle-class anxiety."

Entrepreneurial and Capital Class (企业家与资本阶层): They were the primary beneficiaries of the marketization wave. From TVEs, individual businesses, and private companies to internet giants, the entrepreneurial class were the "institutional pioneers" of the Reform and Opening-up. They broke the monopolies of the planned system, introduced competition, efficiency, and innovation, accumulating vast social wealth and technological capital for China. Especially after the legalization of the private economy in the 1990s and accession to the WTO in 2001, entrepreneurs became the core force driving China's economic globalization. This class benefited most significantly in wealth accumulation. After the 2010s, the number of billionaires in China leaped to the world's highest, and the private economy contributed over 60% of the GDP, 70% of technological innovation, and 80% of urban employment. However, this high concentration of wealth also led to income inequality and social tension, with some capital combining with power to form a "new oligarchic structure." Overall, this group benefited the most and had high satisfaction.

Government and Bureaucratic System (政府与官僚体系): They were the institutional designers and the arbiters of redistribution, and also the biggest beneficiaries of the Reform and Opening-up. From the oligarchic monopolies in major national industries to the widespread "county Brahmins" (local officials), the bureaucratic system controlled important channels for wealth distribution through policy resources and fiscal authority. This guaranteed the state's coordination capacity but also led to rent-seeking and corruption. Entering the 2010s, the state attempted to correct the structural imbalance caused by the combination of power and capital through anti-corruption campaigns, financial regulation, and redistribution policies, but their long-term effect remains uncertain without institutional oversight.

If there is one shortcoming in the 40 years of Reform and Opening-up, I believe the biggest regret is that the government did not initiate political system reform at an appropriate time. Political system reform is not a sudden, overnight democracy, as some imagine, but a long process that requires gradual evolution over decades. The social trust and wealth growth during the economic ascent should have been the optimal window to drive political reform—to "return power to the people" gradually, making the power structure commensurate with the economic foundation. Once economic growth slows and social expectations decline, the timing for reform becomes increasingly difficult. History has repeatedly proven that delayed political reform often leads to institutional rigidity and social fragmentation. The outcomes of the late Qing Dynasty and the Soviet Union serve as cautionary tales. We will reserve the topic of political reform for the final chapter of this series.

Chapter Ten: Lessons from Precedent

The Demands of Capital

In Chapter Eight, we raised a key question: Why do democratization efforts in many late-developing countries often fail? In the last two chapters, we offered a preliminary answer through China's historical process. Since the 1920s, China sequentially underwent a series of profound structural transformations: land reform, secularization, primitive capital accumulation, industrialization, urbanization, marketization, and the formation of the middle class. Many Third World countries, lacking these preconditions, hastily imported democratic systems. They not only fell into the institutional traps described in Chapter Eight but, even if they managed to marginally transform the old society, their economic structure remained stuck outside the threshold discussed in Chapter Nine.

Urbanization without industrialization results in a large influx of landless peasants into cities who cannot be absorbed by a weak manufacturing and service sector, leading to the formation of slums. Marketization without urbanization allows mature multinational corporations to enter quickly and easily swallow the already fragile national industrial system. Democratization without genuine marketization creates an appearance of robust market mechanisms that are, in reality, corroded by collusion between officials and businesses and extensive rent-seeking networks. Without a solid institutional economic foundation, democracy naturally struggles to function effectively.

As the final chapter of this series, we treat democratization as the ultimate link in the chain of modernization, exploring why the maturity of the middle class intrinsically drives changes in the political structure. We previously noted that overcapacity is inevitable once industrialization reaches a certain stage, and the fundamental solution is to expand domestic demand, which requires a large and economically stable middle class. Thus, the conflict between capital and labor, in a highly urbanized environment, compels both sides toward a compromise, fostering the creation of a welfare system and eventually nurturing the urban middle class. This explains why peasant uprisings failed to end the cycle of exploitation for thousands of years, while the workers' movement achieved the establishment of social security systems in just one century. Overcapacity is both the root cause of capitalism's cyclical crises and the driving force for its reform; the prerequisite for expanding domestic demand is the strengthening of the middle class.

Once the middle-class forms, they inevitably seek the right to supervise and participate in public power to protect their wealth and social status. Therefore, to sustain long-term economic growth, the logical end point of industrialization, urbanization, and marketization is the appropriate diffusion of power and the establishment of an institutionalized system of checks and balances. Improved quality of life and the accumulation of cultural capital led the middle class to increasingly participate in the political process. In this chapter, I will focus on demonstrating, from an economic perspective, the structural damage caused by excessive power concentration to market mechanisms. Centralization leads to resource misallocation, distorts the supply-demand structure, and weakens the market's price discovery function and capital allocation efficiency.

There is a common misconception that capital seeks to maximize returns. In fact, capital truly seeks "risk-adjusted return on investment"—that is, achieving a relatively higher return under controllable risk. The basic rule of a market economy is that high risk corresponds to high return, yet under the protection of concentrated power, capital can achieve high return with low risk. A market economy lacking democratic oversight experiences widespread distortion and rent-seeking. Capital flow is no longer determined by market risk-return rates but gravitates toward areas dense with political power. Therefore, if genuine marketization is to be achieved, the dispersion of power and institutionalized checks and balances are indispensable. Capitalists and the middle class alike must realize that long-term wealth security depends on institutional stability before they will support the establishment of moderate democratic mechanisms.

Democracy does not necessarily manifest as "one person, one vote," but the flattening and decentralization of the power structure is an inevitable trend of modernization. Tocqueville, in *Democracy in America*, emphasized that the essence of democracy is not voting but the horizontal mobility of the social structure. When power is dispersed and class mobility increases, innovation vitality and economic efficiency improve; when power is no longer concentrated in the hands of a few but diffused to society through institutional arrangements, wealth distribution becomes more equitable, and the dividends of economic growth can truly benefit more people.

Looking back at China's history, if the present were still 1919, 1949, or 1979, political system reform would not be an urgent historical task. However, today is vastly different. After forty years of Reform and Opening-up, China has completed most of the economic structural reshaping necessary for modernization: the agricultural population has fallen below 50%, and the service sector's share of GDP has risen above 60%. Yet, accompanying this progress, the Chinese economy has once again run into a growth bottleneck. Power concentration is essentially a form of "low-risk investment," but after 2020, it has led to a sharp increase in resource misallocation, distorted market signals, and reduced the marginal efficiency of capital. In 1999, one yuan of fixed asset investment could drive 0.4 yuan of GDP growth; by 2025, this figure had fallen to 0.07 yuan. Meanwhile, China's total GDP reached 65% of the US's in 2015 and has since stagnated at around 70% over the following decade, showing that the growth structure is close to the edge of the "middle-income trap."

Resource Misallocation

The systemic resource misallocation caused by the power structure has become increasingly evident since 2010, spreading across three levels: capital, capacity, and distribution.

First, in **capital allocation**, the expansion of local government debt and ineffective infrastructure is the most prominent symptom. Since the tax-sharing reform of the 1990s, the structure of local government fiscal revenue has become increasingly reliant on land transfers, creating a path dependency on "land finance." To pursue visible "political achievements," local governments have enormous incentive to engage in inefficient or even non-productive fixed asset investments. To bypass budget constraints and pursue higher GDP data, local governments established a

large number of Local Government Financing Vehicles (LGFVs). These platforms, backed by government credit, were able to obtain bank loans and issue bonds at costs far below market risk pricing. Capital was drawn into extremely low-profit, or even zero-cash-flow, projects like "Iron-Concrete-Base" infrastructure (铁公基 *tiě gōng jī*) and "industrial parks," instead of flowing to innovative private tech companies or emerging service industries with the highest returns. The consequence is that over-investment not only inflated the implicit debt of local governments, creating a major "grey rhino" of financial risk.

Furthermore, land finance caused the distorted development of the real estate sector. Housing should be a product for livelihood, but under the distortion of the market by concentrated power, it was alienated into a tool for local governments' "land finance" and a "low-risk, high-return" asset for capital hedging. The absolute monopoly of power over land supply allowed local governments to sell land at high prices to fill their coffers. This artificially inflated property prices, separating them from residents' actual purchasing power, which in turn inhibited residents' consumption willingness (as most income was diverted to mortgage payments). Banks, relying on the implicit guarantees of local governments, rushed to pour capital into real estate and land-backed loans, instead of higher-return segments of the real economy. This created a climate of "universal property speculation." The continuous expansion of the bubble began to burst after 2020, severely dragging down the overall economy and exposing systemic financial risks.

Second, in **capacity allocation**, State-Owned Enterprises (SOEs) naturally hold resource advantages in a power-led economic structure. They leverage political credit to obtain low-cost land, low-interest loans, and administrative operating licenses, directing market resources toward inefficient enterprises with government backgrounds, rather than private sectors with stronger innovation potential, especially small and medium-sized tech firms. The result is the strengthening trend of "the state advances, the private sector retreats" (国进民退 *guó jìn mín tuì*). Private enterprises face long-term difficulties in accessing affordable financing and bear a disproportionate share of institutional risks; while SOEs, lacking market competition pressure, have insufficient innovation incentives, leading to a decline in overall innovation efficiency and sluggish improvement in Total Factor Productivity (TFP). Simultaneously, concentrated investment in subsidized industrial policies, such as in electric vehicles and chips, boosted short-term capacity but also created a new kind of involution characterized by high entry barriers and fierce competition for subsidies. Enterprise profit models lack sustainability, making sector expansion difficult to maintain once subsidies are withdrawn.

A deeper problem is that SOEs monopolize high-profit industries, forcing private capital to undertake high-risk innovative investments without receiving corresponding financial support. The banking system, driven by risk aversion, continues to concentrate funds in local LGFVs and SOE entities, leaving the private sector's capital financing environment in a structural disadvantage long-term. Solving this requires more than simple SOE privatization; it demands institutional reform that forces the state sector to bear market-based risks commensurate with their resource allocation power, allowing competitive industries to truly return to market logic.

Finally, at **the distribution level**, power concentration not only causes reduced efficiency in resource allocation but also exacerbates income and wealth inequality. Under extractive institutions, the power elite and its affiliated capital groups can concentrate the benefits of economic growth at the top, while the wage growth of ordinary laborers and the proportion of labor income in GDP are long suppressed. The development space for the middle class is thus constantly shrinking. This fundamentally deviates from the core strategy of expanding domestic demand and relying on consumption-driven economic growth, leaving the entire economy lacking sustainable momentum.

The continuous rise of educational credential devaluation and housing pressure weakens social mobility, gradually solidifying the class structure, which is evolving into a system akin to the Indian caste system: CCP officials at various levels form the new "Brahmin class," civil servants and SOE managers within the system constitute the new "Kshatriya class," urban wage-earning families form the new "Vaishya class," and peasants and migrant workers remain the underlying "Shudra class." This distribution pattern and social structure not only inhibit the expansion of domestic demand but also weaken the momentum for sustained economic growth.

Economic Bottlenecks and Power Diffusion

Since 2010, the deep-seated cause of China's economic slowdown is no longer cyclical fluctuation, but the systemic misallocation of resources and structural inefficiency caused by highly concentrated power, which detaches capital from the market's risk-return principles. To break through the growth bottleneck and achieve long-term economic sustainability, the boundaries between power and the market must be fundamentally clarified. Capital must return to genuine market pricing mechanisms, and risk and reward must be re-matched. The core of this is to promote the diffusion of power and build inclusive institutions, establishing the middle class as the institutional protector of wealth security and economic vitality, rather than the institutionally damaged party.

China's rapid economic growth over the past four decades primarily relied on an factor-driven model—achieving economic expansion through large-scale capital input, the dividend of cheap labor, and the centralized allocation of land and other key resources. In the early stage of industrialization, this model demonstrated a clear "state mobilization advantage," rapidly concentrating factors of production to drive infrastructure construction and export-oriented industry development. However, once per capita GDP crossed the \$10,000 threshold, the marginal effect of economic growth gradually diminished, and the traditional factor-driven model faced an efficiency bottleneck. This phenomenon can be understood through the Solow Growth Model: in the stage dominated by factor input, the diminishing marginal product of capital is inevitable, and without introducing technological progress or institutional innovation, long-term growth will stagnate in the middle-income trap.

The core of the factor-driven model is that highly concentrated power can rapidly allocate resources, but this resource allocation is often insensitive to efficiency feedback, easily leading to over-investment, low returns, or even negative marginal product. In contrast, innovation-driven economy relies on decentralized, bottom-up

trial-and-error mechanisms, requiring institutional protection of property rights, incentives for risk-taking, and the free flow of capital. Innovation is inherently a non-linear, dispersed process. It requires economic entities to make investment decisions in uncertain environments, while central authority tends to avoid uncertainty, preferring "large and stable" projects, thus creating a structural conflict with the institutional environment necessary for innovation. Daron Acemoglu, in *Why Nations Fail*, emphasizes that inclusive institutions provide the institutional prerequisite for innovation and long-term economic growth by guaranteeing property rights and market freedom, while centralized and extractive institutions often suppress entrepreneurship and technological progress. This explanation aligns perfectly with the phenomenon of resource misallocation caused by China's current high power concentration.

In this context, "deepening market-oriented reform" is not merely the optimization of transactional systems but an inevitable requirement for adjusting the power structure. If the market lacks competition and is rife with rent-seeking, capital will be guided to depend on power, rather than flow to high-productivity, high-return innovative sectors. This confirms the viewpoint of New Institutional Economics: institutions determine economic incentives, and economic incentives determine resource allocation efficiency. The institutional distortion caused by highly concentrated power causes resource allocation to deviate from the market's risk-return principles, thereby undermining long-term growth potential. Only by institutionalizing the diffusion of power, allowing resource allocation and innovation decisions to gradually break free from administrative interference, can the transition from factor-driven to innovation-driven growth be smoothly achieved and the middle-income trap be crossed.

The demand for wealth security by the middle class is the intrinsic driver of this institutional change. Capitalists pursuing long-term returns must operate in an institutional environment where policy is predictable, power is dispersed, and rules are transparent. The middle class's assets—including housing, financial investments, and labor income—are vulnerable to erosion if accumulated in a centralized and rent-seeking environment. Through democratization or institutional arrangements that diffuse power, the middle class can supervise public finance, check rent-seeking behavior, and ensure that wealth accumulation aligns with economic incentives. This is completely consistent with the "inclusive institutions—economic growth" logic proposed by institutional economics: institutions reduce uncertainty and power-related rent-seeking, diverting resources from high-risk, low-efficiency power-affiliated activities toward genuine innovative investment, thereby improving Total Factor Productivity (TFP) and the quality of economic growth.

Intrinsic Demand and Gradual Reform

Given China's unique historical background, institutional tradition, and massive economic volume, its path to power diffusion cannot simply copy Western models. Instead, it is more likely to manifest as an intrinsic, gradual institutional evolution, driven by two endogenous variables: slowing economic growth and the expansion of the middle class. From a macroeconomic model perspective, when the marginal product of capital diminishes and the factor-driven growth model encounters an efficiency bottleneck, institutional change becomes the key to improving TFP and sustainable growth. Power diffusion does not necessarily imply violent political

upheaval but unfolds gradually at the economic and administrative levels to match the inherent requirements of a market economy for resource allocation efficiency and risk control.

Decentralization and transparency of administrative power are the primary manifestations of power diffusion in the economic sphere. Institutional arrangements that enhance the transparency and constraint of administrative power can reduce the inhibitory effect of Policy Uncertainty on long-term investment, thereby improving resource allocation efficiency. Specific mechanisms include judicial independence, budget openness and supervision, and the professionalization of macroeconomic policymaking. Judicial independence ensures contract enforcement and property rights protection, providing legal guarantees for innovative investment; budget transparency and supervision constrain the fiscal behaviour of local governments, reducing rent-seeking space and forcing the marginal output of public investment to align with economic efficiency; macroeconomic policy professionalization, through independent central banks and regulatory agencies, frees macroeconomic and industrial policies from political randomness, thereby mitigating the negative externality of policy uncertainty on capital investment decisions.

Local autonomy and the matching of fiscal power to administrative responsibilities reflect the necessity of vertical power diffusion. China's vast territory and significant economic disparities mean that enhancing local autonomy can activate regional economic vitality. Delegating some taxing authority while clarifying local public service responsibilities helps alleviate local reliance on land finance and optimize the local fiscal structure. In terms of institutional innovation, the hukou system should be gradually abolished to end the urban-rural dualism. Allowing peasants free mobility and encouraging urbanization will foster a credit development model similar to the rural model of the 1980s. Limited, differentiated experiments at the local level will create a mechanism akin to "institutional competition," gradually eliminating inefficient administrative models and allowing the optimal methods of power configuration to be discovered and promoted through local practice.

Institutionalized participation of the middle class represents power diffusion at the societal level. The middle class's demand for wealth security intrinsically translates into an institutional call for the right to political participation and supervision. The autonomy of industry associations and trade unions can regulate resource allocation and industry standards in specialized fields, forming a bottom-up check on power. The expansion of community autonomy and public affairs management rights ensures that public services and social policies are formulated closer to the actual interests of the middle class, achieving horizontal dispersion of power at the social level. The government should appropriately relax the limits on speech, allowing some critical voices to exist, and permitting media and non-governmental organizations to voice opinions different from the governments. This social participation not only enhances policy responsiveness but also reduces institutional risk, strengthening the resilience of the market economy.

Gradual institutional reform, encompassing the diffusion of power at the administrative, local, and social levels, is the inevitable path for the Chinese economy to cross the middle-income trap and achieve long-term sustainable growth. Unfortunately, China missed the optimal window for political system reform during the 40 years of economic

take-off. The smooth progression of future social transformation depends not only on the cognition and institutional design of the governance body but also on the patience and participation of the middle class and the public.